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Atlas of Compact Groups of Galaxies

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This paper summarizes available data on a homogeneous sample of 100 compact groups of galaxies, found in 1982 by a systematic search of the Palomar Observatory Sky Survey prints. It presents mosaic images of all groups, in blue and red bandpasses, assembled from individual exposures obtained with a CCD detector at the Canada-France-Hawaii Telescope. Photometric and spectroscopic data for individual galaxies, along with optical, infrared and radio fluxes are tabulated. Dynamical properties such as crossing times and mass-to-light ratios are listed for all groups with three or more members with velocities within 1000 km s^{-1} of the median. Individual descriptions are provided for each group, as well as a more general discussion of the groups as a whole. The primary intent of this work is to provide a convenient reference combining the best available optical images of these groups with a concise tabulation of the relevant data.

1. INTRODUCTION

Compact groups are small, relatively isolated, systems of galaxies with projected separations comparable to the diameters of the galaxies themselves. They have been the subject of considerable interest ever since the discovery of the first compact group by Stephan in 1877. Galaxies in these groups are generally believed to be physically associated, with the exception of those galaxies with discordant redshifts (Hickson and Rood 1988). The small sizes of compact groups imply a high space density of galaxies, higher in fact than any other known systems of galaxies. Such high densities, coupled with galaxy orbital velocities which are comparable to internal stellar velocities imply that galaxies in such groups should be strongly affected by gravitational interaction. Indeed, many of these groups contain galaxies which show clear morphological signs of interaction, and many of them are included in compilations of interacting galaxies (Arp 1966, Voronstov- Vel'yaminov 1959, 1977). These interactions are expected to occasionally be so severe as to result in the merger of two or more galaxies. Theoretical (Hickson, Richstone and Turner 1977, White 1990) and numerical (Barnes 1989, 1990) estimates indicate that the timescale for mergers may be short compared to the age of the universe. This, combined with the observation (Mendes de Oliveira and Hickson 1991) that compact groups comprise almost 1% of the visible matter in the universe, suggests that

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a significant fraction of present day elliptical galaxies may have evolved in compact groups.

Consideration of the short apparent dynamical times of compact groups, as well as lingering questions concerning the frequency of galaxies with discordant redshifts in known groups prompted the author, in 1981, to begin a systematic program of study of these objects. In order to obtain a reasonably large homogeneous sample of compact groups, a search was undertaken of the entire set of Palomar Sky Survey red prints in the collection of the University of British Columbia, for small groups of galaxies satisfying well-defined selection criteria. This resulted (Hickson 1982) in a catalogue of exactly 100 compact groups satisfying the criteria

$$n \geq 4 \text{ with } m \leq m_1 + 3$$
$$R_N \geq 3R_G$$
$$\bar{\mu}_G < 26$$

where n is the number of galaxies in the group, m is the estimated red magnitude of the faintest group member, m_1 is the estimated red magnitude of the brightest group member, R_G is the radius of the smallest circle containing the centres of the group members, $\bar{\mu}_G$ is the mean surface brightness contained by this circle and R_N is the distance from the centre of the circle to the nearest nonmember galaxy satisfying the same magnitude criterion.

Some minor changes to the membership of the original catalog were made by Hickson, Kindl and Auman (1989, hereafter HKA), to ensure compliance with the selection criteria using photometric magnitudes derived from CCD images. The revised catalogue contains 60 quartets, 25 quintets, 8 sextets, 6 septets and one octet.

This sample of groups has subsequently received extensive observational study (reviewed by Hickson 1990). Optical spectra and redshifts have been obtained for all galaxies (Hickson *et al.* 1992, hereafter HMHP; see also Hickson *et al.* 1984, Tikhonov 1986, Hickson, Kindl and Huchra 1988b). 6-m photographic plates have been obtained for all groups (Tikhonov 1987a,b, 1989), and broad-band (B and R) CCD images have been obtained for all galaxies (Hickson, Kindl and Auman 1989) magnitudes and Hubble types have been derived from both these data sets. Additional broad-band photometry has been obtained for selected galaxies (Zepf 1991). Radio studies include HI line observations (Williams and Rood 1987, Williams and van Gorkom 1988) and continuum observations (Menon and Hickson 1985, Menon 1992). Infrared (Hickson *et al.* 1989) studies based on the IRAS data base have now been published, and X-ray observations exist for several groups (Bahcall, Harris, and Rood 1984). In addition, there have been several detailed studies of the neighborhoods of these compact groups (Sulentic 1987, Rood and Williams 1989, Kindl 1990).

This paper presents a compilation of all systematic data obtained by the author or his collaborators, on this sample of compact groups. In addition, it presents for the first time, optical images of all groups, assembled from CCD images in red and blue bandpasses obtained at the Canada-France-Hawaii Telescope (CFHT). It is hoped that this work may provide a convenient reference not only for those

engaged in studies of this particular sample, but also for those interested in compact groups or interacting galaxies in general.

2. THE ATLAS

The Atlas pages are arranged in order of the group catalogue number, which follow the order of increasing right ascention of the group centre. Information for each group is provided in two pages. The first page contains data on the group and member galaxies, as follows:

Group Identification and Comments

Identification of catalogued galaxies is by lower case letter, as in HKA. A small figure depicts individual galaxies as ellipses labeled by their letter designation. The centres of these ellipses are located at the measured coordinates of the centres of the respective galaxies, and the major and minor axes of the ellipses correspond to the measured major and minor axes of the isophote corresponding to a surface brightness in the blue band of 25.0 magnitudes arcsec^{-2}. These drawings are scaled so that the smallest circle containing all the galaxy centres has a diameter equal to 2/3 the length of the box, and is centred in the box. Following Hickson (1982) and HKA, only galaxies that satisfy the selection criteria are included. In particular, galaxies which are more than three magnitudes fainter than the brightest galaxy are not included in the catalogue, or in any of the derived properties of the groups.

Beside the identification box is a short description of the group, noting any distinctive features, and including any other names.

Group Data

Data for the group is summarized in a table labeled *Group Data*. In all cases, *member galaxy* refers only to those galaxies which satisfy the selection criteria. Unless otherwise stated, data are taken from, or derived from data listed by HKA or HMHP. Distances are estimated from the median galaxy redshift using a Hubble constant of 100 km s^{-1} Mpc^{-1}. The entries in this table are as follows:

1. right ascention of the centroid of the member galaxies
2. declination of the centroid of the member galaxies
3. galactic longitude l^{II} of the centroid of the member galaxies
4. galactic latitude b^{II} of the centroid of the member galaxies
5. median redshift of the member galaxies
6. total corrected magnitude of the group on the B_T system, obtained by summing the fluxes of the member galaxies

7. number of group members
8. number of group members with velocities within 1000 km s^{-1} of the median galaxy velocity
9. median projected galaxy-galaxy separation R, in kpc
10. radial velocity dispersion, defined as the root-mean-square of the galaxy velocities with respect to the velocity centroid, in km s^{-1}
11. crossing time of the group, defined as $4R/\pi V$ where V is the three-dimensional velocity dispersion, statistically corrected for measurement errors, from HMHP, multiplied by the Hubble constant H.
12. median of the four mass estimates given by HMHP divided by the group blue liminosity, in solar units.

Galaxy Data

Data for individual galaxies appear in the table labeled *Galaxy Data*. The entries are as follows:

1. right ascention of the centroid of the nuclear region of the galaxy
2. declination of the centroid of the nuclear region of the galaxy
3. heliocentric radial velocity of the galaxy, in km s^{-1}
4. estimated standard error of the radial velocity
5. galaxy Hubble type, as determined from the CCD images
6. length of the major axis of the $\mu_B = 25.0$ magnitude $arcsec^{-2}$ isophote
7. length of the minor axis of the $\mu_B = 25.0$ magnitude $arcsec^{-2}$ isophote
8. B_T asymptotic magnitude corrected for internal and external extinction
9. $B - R$ colour within the $\mu_B = 24.5$ magnitude $arcsec^{-2}$ isophote
10. logarithm of the infrared flux density in the 60 μm bandpass of the Infrared Astronomical Satellite (IRAS), in Jy
11. logarithm of the infrared flux density in the 100 μm IRAS bandpass, in Jy
12. logarithm of the radio flux density at 20 cm wavelength from the Very Large Array observations of Menon and Hickson (1985) and Menon (unpublished data)
13. other names.

Group Images

Individual images of all groups were obtained using the 512 x 320 pixel RCA-1 CCD detector on the Canada-France-Hawaii Telescope during three separate observing runs from 1983 to 1985. All images were obtained by 200 second exposures through standard blue (B) and red (R) broad-band filters. The image scale was 0".42 $pixel^{-1}$. Images were processed in the standard manner to remove dark current and to correct for spatial sensitivity variations. The processed images were combined, where necessary, to produce mosaic images of the larger groups. These images were scaled and offset in order that individual galaxies be located at the

correct relative positions based on x-y measurements made from the POSS prints using the Mann measuring engine at the VLA. In regions of image overlap, stars were used to provide accurate image registration. Intensity values in the overlap regions are averages of the individual images. All image processing was done at UBC on UNIX-based computers using software written by the author.

These images appear on the pages facing the tabular data for each group. The upper image is in the blue bandpass and the lower image is in the red bandpass. The images of each group have been scaled to provide a convenient fit to the page. The angular scale of each image is indicated by the horizontal bar to the lower left which corresponds to a length of one minute of arc. All catalogued galaxies appear in these images with the exception of galaxy 64c. This galaxy was catalogued by HKA, after the completion of the imaging survey.

3. CONCLUSIONS

The images presented here provide insights into the nature of the groups themselves. While a few groups are surely chance alignments of unrelated galaxies, and while other groups may contain one or two such galaxies, most galaxies in these groups do appear to be physically related. The present evidence suggests that the frequency of discordant redshifts in these groups is consistent with their being due to chance alignments (Hickson, Kindl and Huchra 1988a, Mendes de Oliveira 1992). Indeed, galaxies with positive discordant redshifts are almost always smaller and fainter than the lower-redshift group members, and galaxies with negative discordant redshifts tend to be larger and brighter, as expected if their redshifts are cosmological in nature.

Close inspection of the images reveals morphological peculiarities indicative of present or recent gravitational interactions in at least a third of all the galaxies. The high incidence of morphological peculiarity is consistent with the high incidence of dynamical abnormalities indicated by asymmetries and other peculiarities of the rotation curves of spiral galaxies in the groups observed by Rubin, Hunter and Ford (1991), and supports the interpretation of the groups as bound dynamical entities. Detailed studies of the photometric profiles of galaxies in these images (Mendes de Oliveira 1992) should further elucidate the nature and frequency of interactions and mergers of galaxies in these groups. Given that a significant fraction of all galaxies are found in compact groups, the results of such studies will be important for an understanding of galaxy evolution in general.

As observed by Hickson, Kindl and Huchra (1988b), galaxy morphological type correlates with several physical properties of the groups. The strongest observed correlation is with velocity dispersion, where there is a clear tendency for spiral-poor groups to have higher velocity dispersions than spiral-rich groups. The cause of this effect is not understood, yet the mechanism responsible may play a central role in the formation and evolution of galaxies. Further careful observational and theoretical work should ultimately resolve this question.

Additional unexplained phenomena appear in the radio studies of these groups.

In their survey of 88 groups, Menon and Hickson (1985) found that elliptical galaxies which exhibit detectable radio emission are almost always first ranked optically, irrespective of their optical luminosity. This strong dependence on *relative* rather than *absolute* luminosity strongly suggests that either the first-ranked galaxy is an unusual object, or that its location, possibly near the centre of the gravitational potential, is in some way conducive to radio emission. While plausible scenarios can be offered to account for this phenomena, the true explanation is by no means clear at this time. Further studies of the groups at radio and infrared wavelengths, and an analysis of the proximity of galaxies near to the radio source (Menon 1992), should further illuminate this problem.

I wish to acknowledge the important contributions of all my collaborators in the studies of compact groups, and particularly the work of Enrico Kindl, Claudia Mendes de Oliveira, John Huchra and Kochu Menon. I owe a special debt to Giorgio Palumbo whose continued encouragement and enthusiasm helped to make this Atlas a reality. Financial support from the Natural Sciences and Engineering Research Council of Canada, and NATO is gratefully acknowledged.

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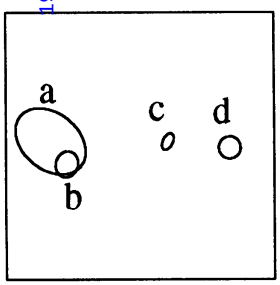
Atlas of Compact Groups of Galaxies

Group 1



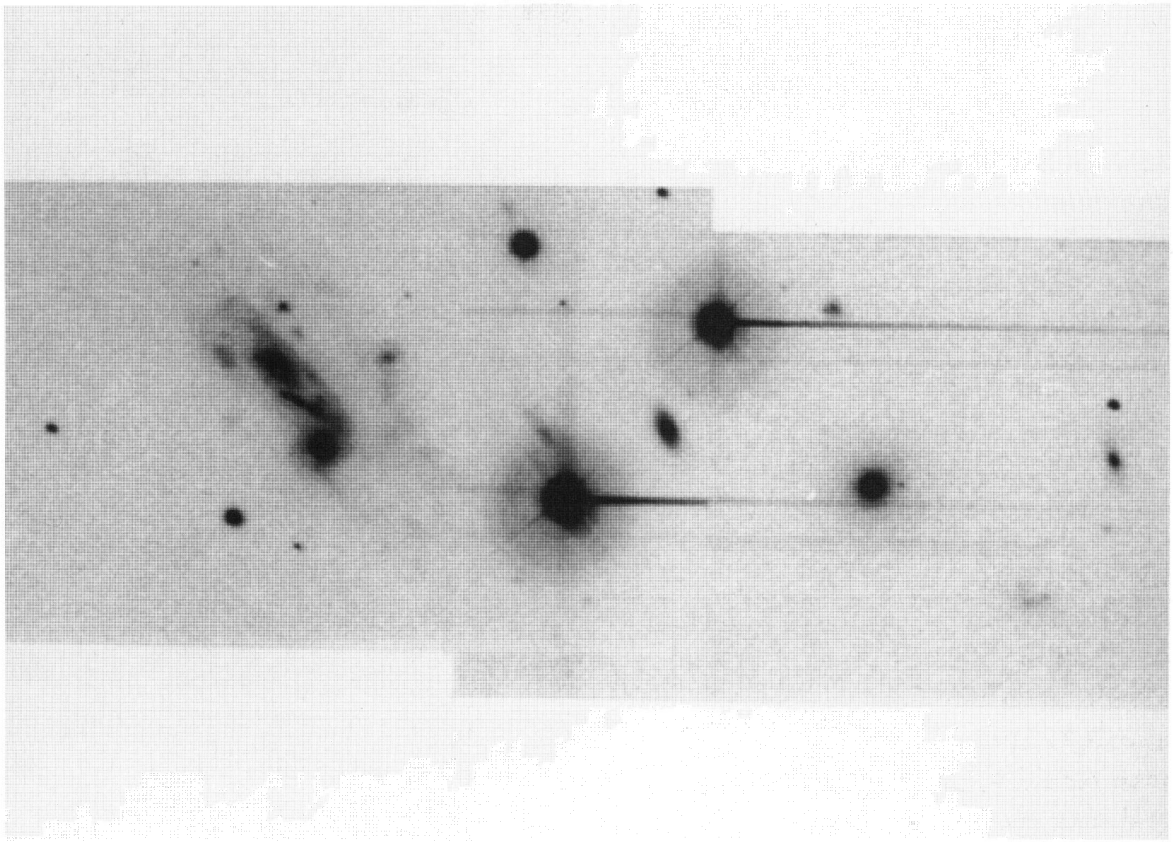
Group 1 contains the interacting pair of galaxies UGC248a/b plus two small early-type galaxies at the same redshift. As with most groups, several fainter galaxies can be seen which are not catalogued as they fall below the three magnitude cutoff.

GROUP DATA

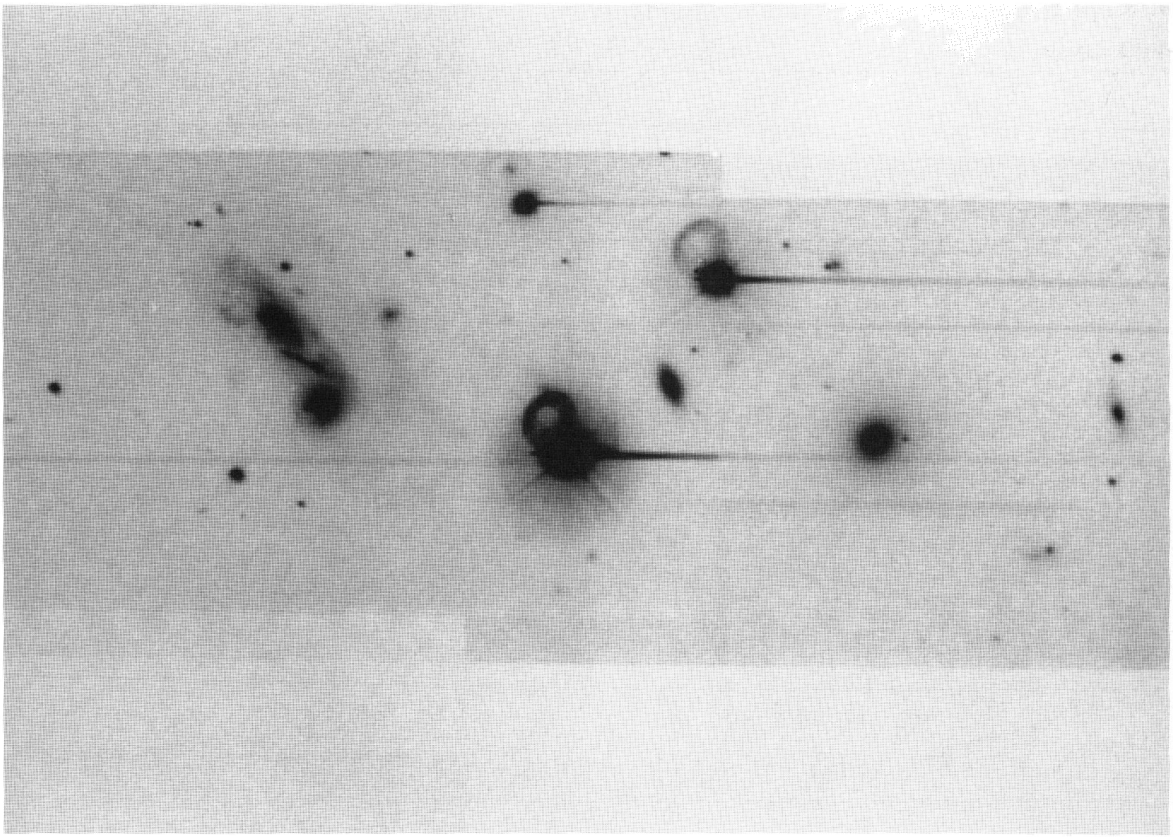
r.a. (1950)	(h m s)	00 23 24.41
dec. (1950)	(° ' ")	+25 26 46.7
galactic longitude	(°)	115.78
galactic latitude	(°)	−36.80
mean redshift		0.0339
total blue magnitude (B_{TC})		13.64
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	49.0
radial velocity dispersion	(km/s)	85.1
crossing time	(Ht_c)	0.0479
mass-to-light ratio	($M_\odot/L_\odot$)	14.8

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	23 29.9	23 28.8	23 17.3	23 21.7
δ	(' ")	26 53.9	26 31.9	26 47.6	26 53.4
v	(km/s)	10237	10266	10056	10120
Δv	(km/s)	39	40	34	47
T		Sc	Im	E0	S0
a	(")	37.60	12.80	10.70	8.50
b	(")	26.90	10.70	10.70	4.80
B_{TC}		14.43	15.04	15.57	16.50
$B-R$		1.29	1.36	1.69	1.60
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		U248a	U248b		

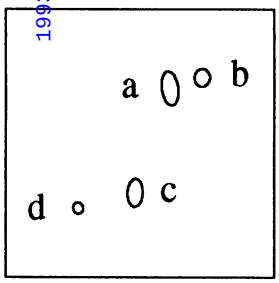


B



R

Group 2



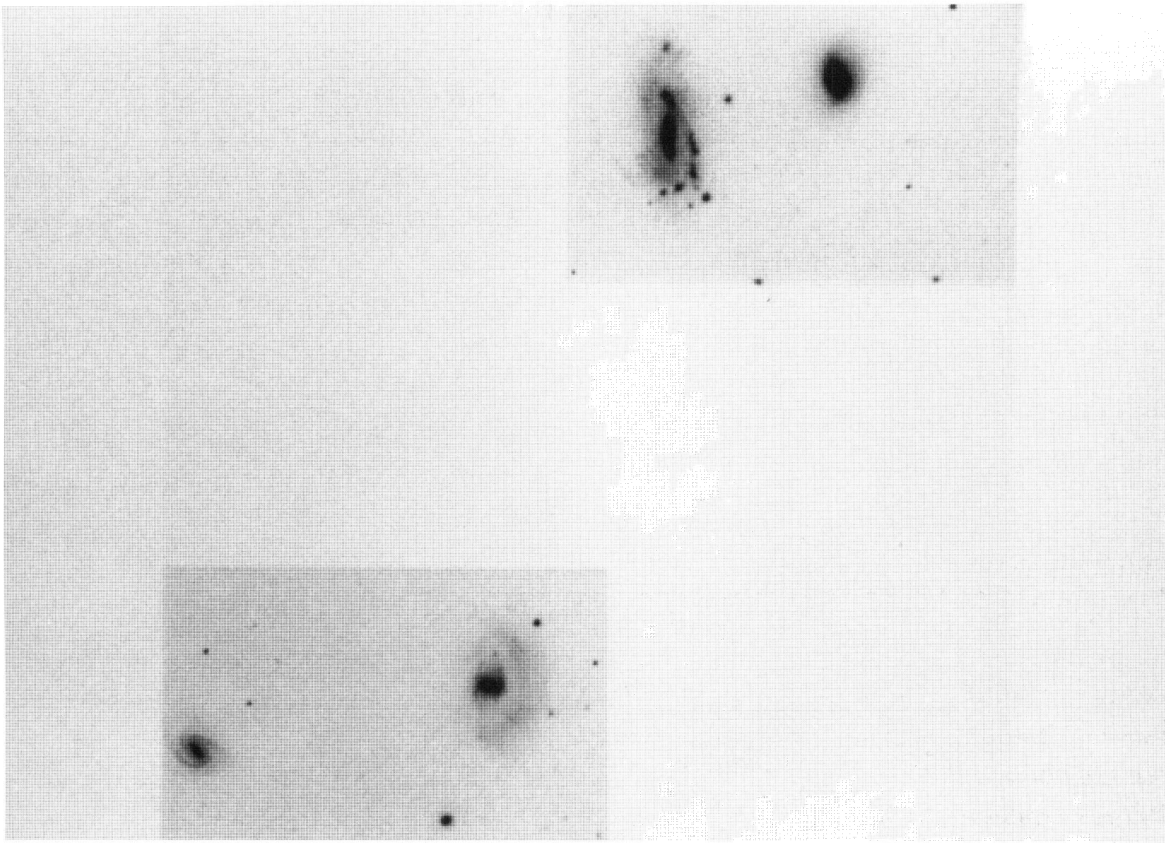
Group 2 consists of a triplet of galaxies with accordant redshifts plus a fainter member (d) which has a much higher redshift. All members of the triplet show signs of interaction. Galaxies a and c have a disturbed morphology and b is an infrared source.

GROUP DATA

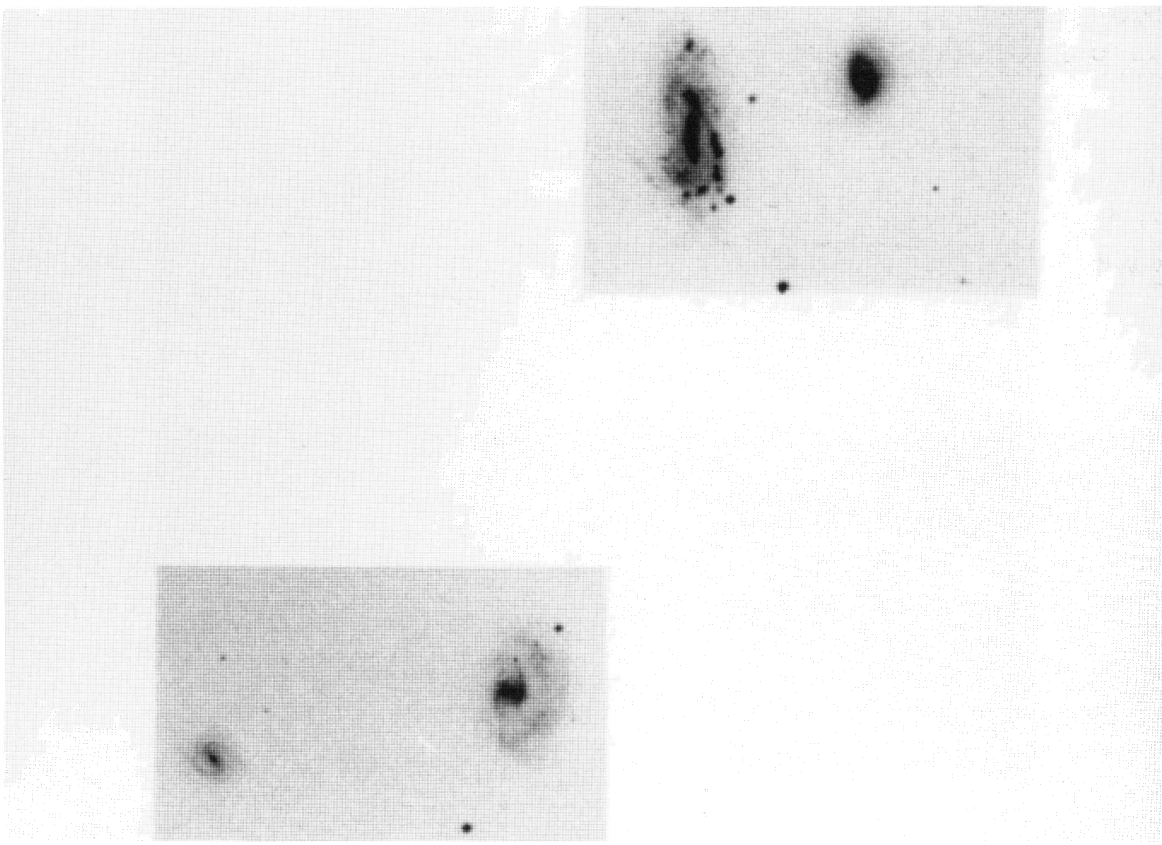
r.a. (1950)	(h m s)	00 28 52.55
dec. (1950)	(° ' ")	+08 09 27.8
galactic longitude	(°)	114.48
galactic latitude	(°)	−54.11
mean redshift		0.0144
total blue magnitude (B_{TC})		12.61
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	52.5
radial velocity dispersion	(km/s)	55.0
crossing time	(Ht_c)	0.0871
mass-to-light ratio	($M_\odot/L_\odot$)	12.0

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	28 48.9	28 43.7	28 54.3	29 03.3
δ	(' ")	11 32.0	11 57.0	07 28.9	06 53.1
v	(km/s)	4326	4366	4235	21340
Δv	(km/s)	30	34	34	85
T		SBd	cI	SBc	SBb
a	(")	40.50	21.20	32.90	13.20
b	(")	19.70	18.40	18.10	12.00
B_{TC}		13.35	14.39	14.15	15.72
$B-R$		0.88	1.14	1.10	1.54
$\log F_{60\mu}$	(Jy)		3.69		
$\log F_{100\mu}$	(Jy)		5.46		
$\log F_{20cm}$	(mJy)				
name		U512	M352	U514	U515

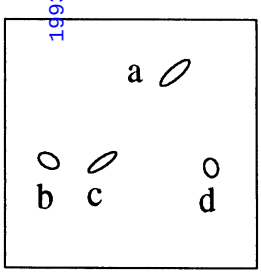


B



R

Group 3



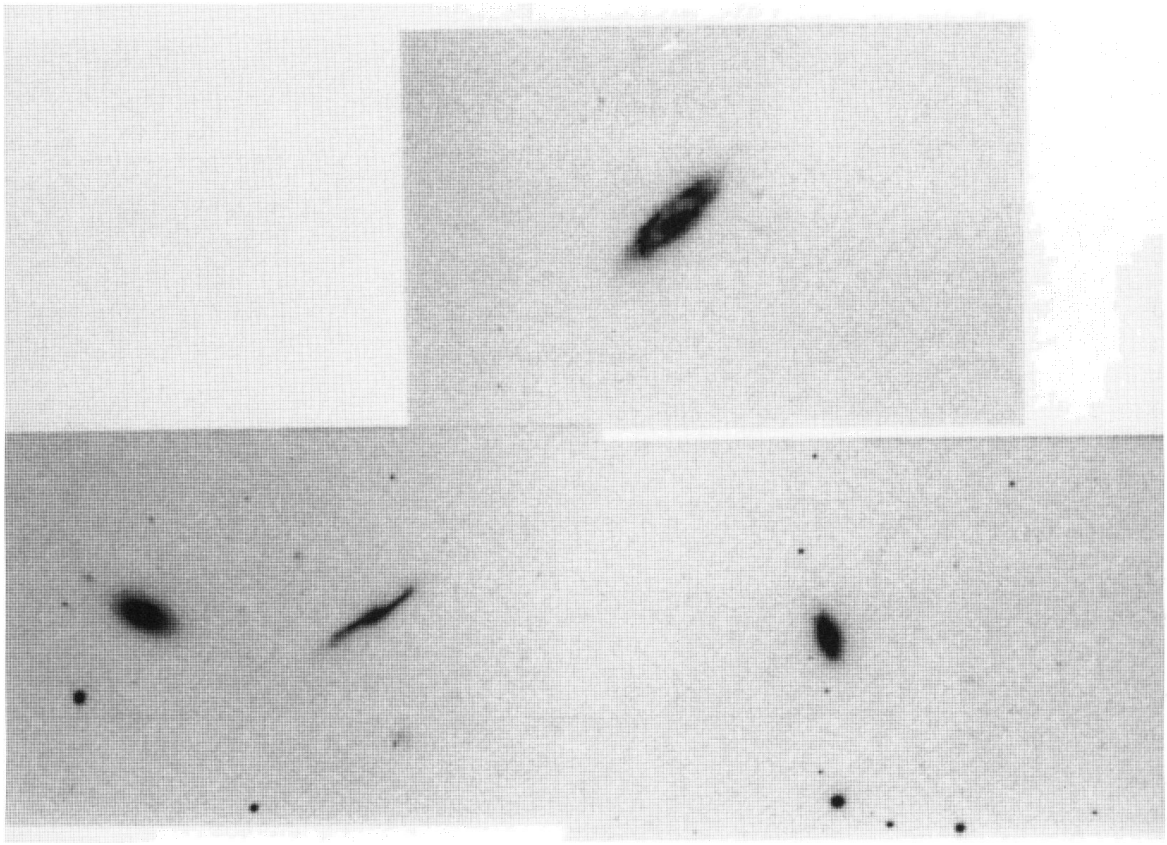
Group 3 consists of a loose triplet plus a galaxy (c) with a much higher redshift. The triplet has a relatively high velocity dispersion and mass-to-light ratio.

GROUP DATA

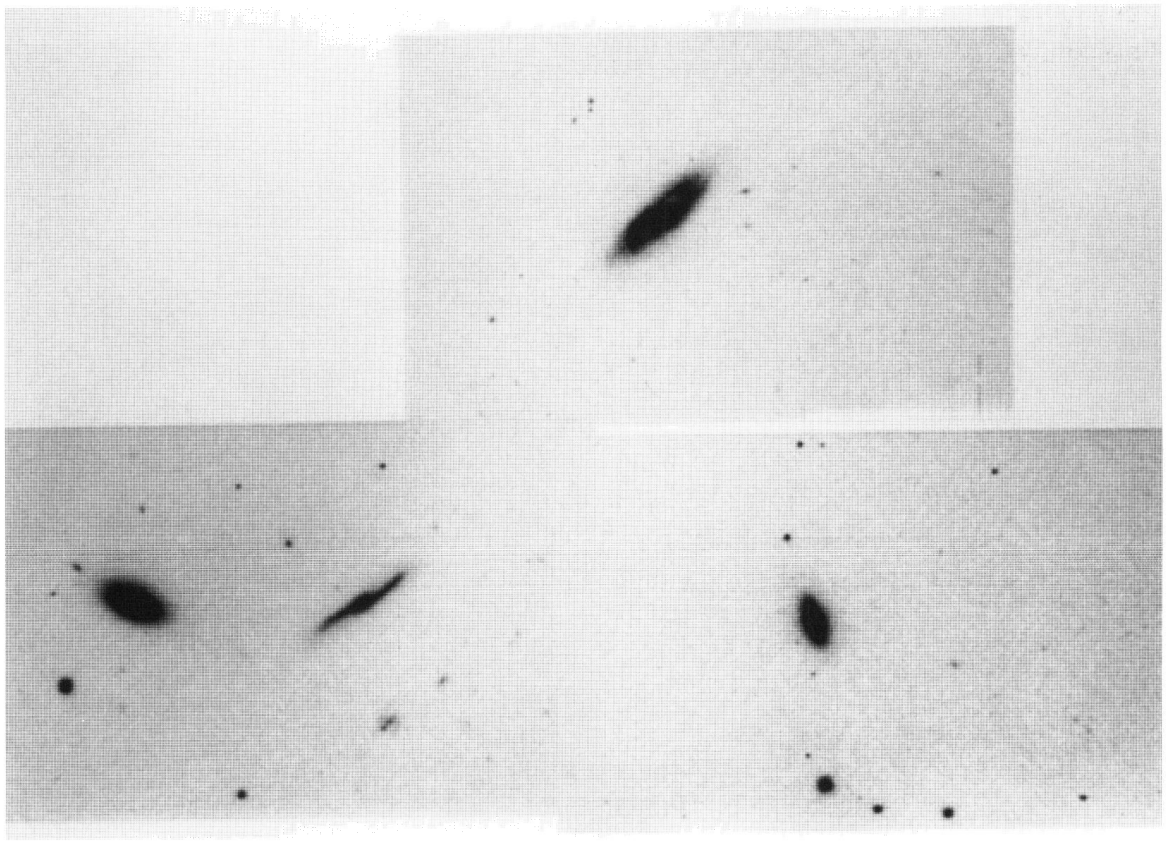
r.a. (1950)	(h m s)	00 31 44.55
dec. (1950)	(° ' ")	−07 52 2.3
galactic longitude	(°)	110.39
galactic latitude	(°)	−70.04
mean redshift		0.0255
total blue magnitude (B_{TC})		13.78
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	77.0
radial velocity dispersion	(km/s)	251.2
crossing time	(Ht_c)	0.0229
mass-to-light ratio	($M_\odot/L_\odot$)	363.1

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	31 40.7	31 52.6	31 47.6	31 37.3
δ	(' ")	50 25.4	52 30.9	52 32.8	52 39.9
v	(km/s)	7302	7860	11545	7804
Δv	(km/s)	51	45	68	30
T		Sc	SB0a	Sd	S0
a	(")	26.60	15.40	23.70	13.10
b	(")	8.00	9.60	6.40	9.70
B_{TC}		14.72	15.28	15.87	15.64
$B-R$		1.41	1.71	1.37	1.69
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

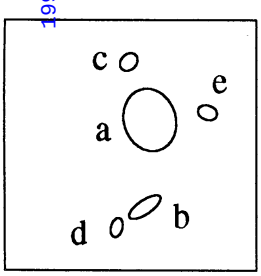


B



R

Group 4



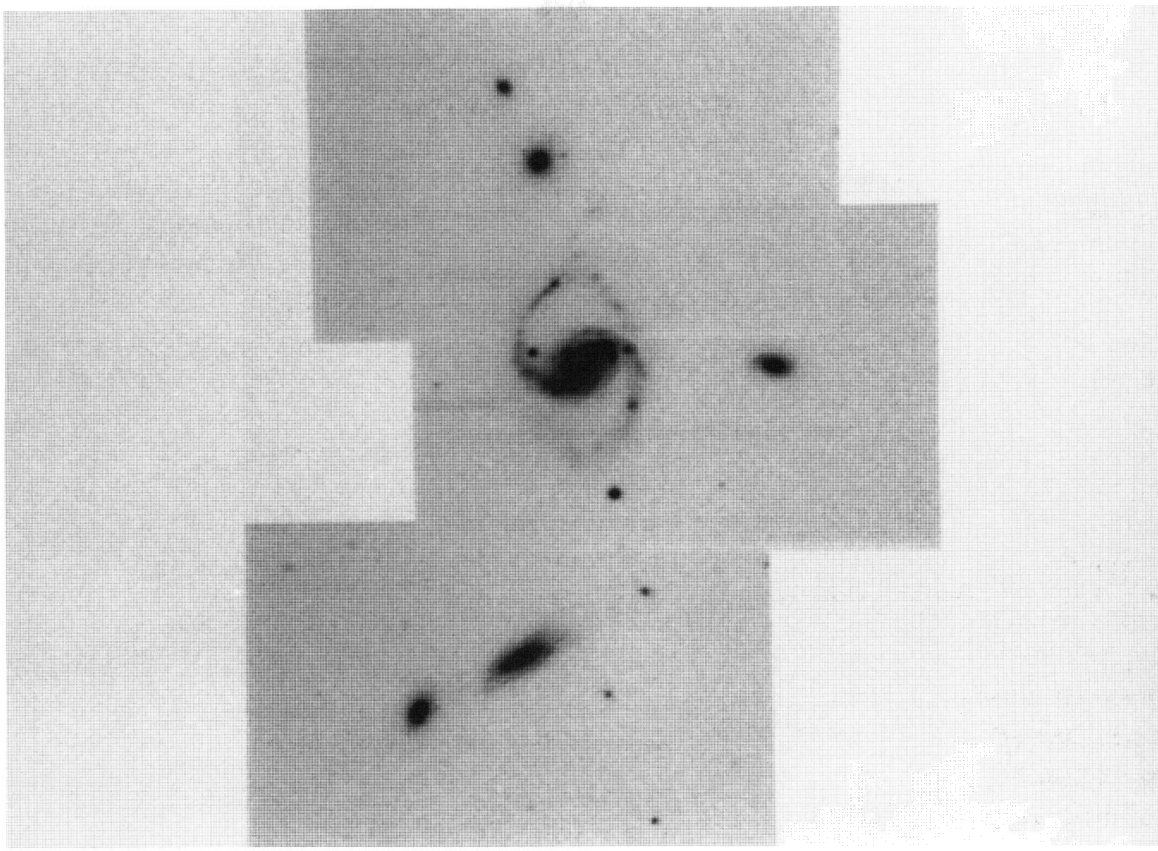
Group 4 consists of an accordant triplet plus two galaxies with discordant redshifts. Galaxy *e* has a much higher redshift, while galaxy *b* has a redshift 1115 km s^{-1} lower that the median redshift of the triplet. The brightest galaxy is an infrared source.

GROUP DATA

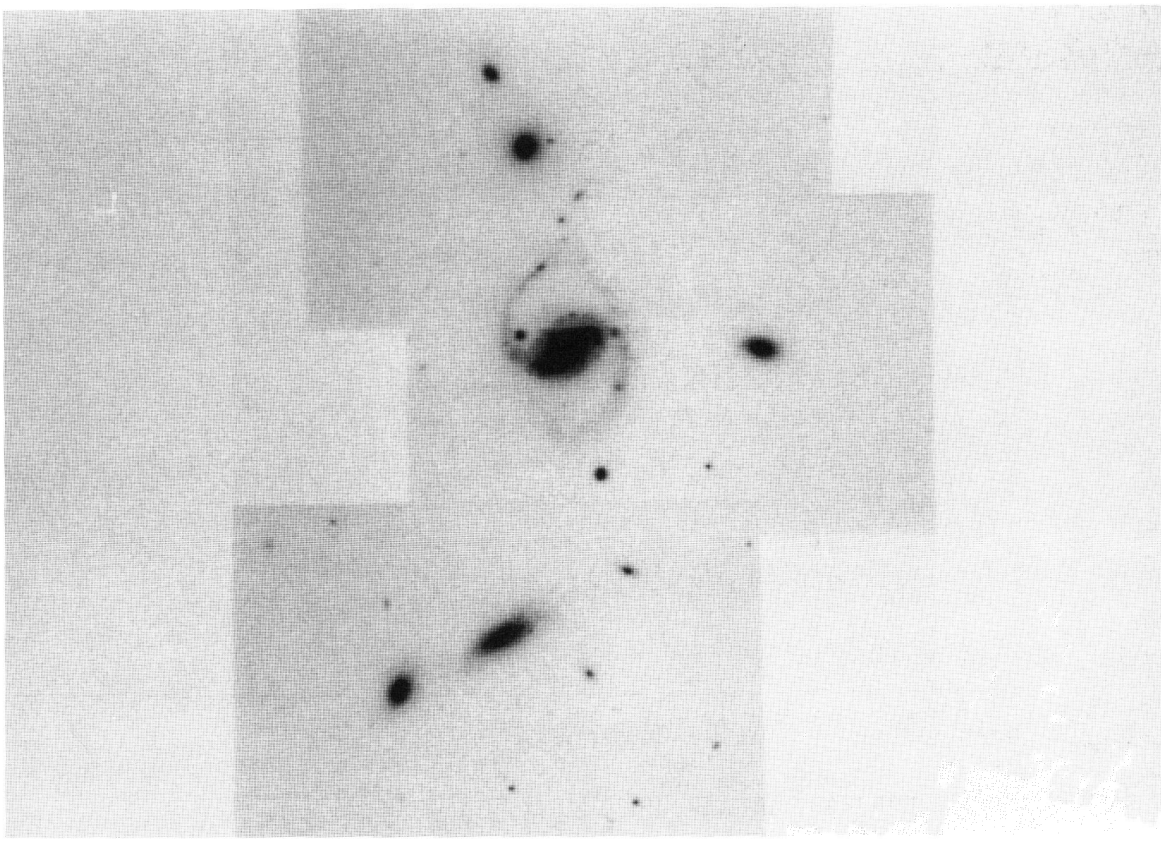
r.a. (1950)	(h m s)	00 31 43.72
dec. (1950)	(° ' ")	−21 43 24.9
galactic longitude	(°)	87.40
galactic latitude	(°)	−83.10
mean redshift		0.0280
total blue magnitude (B_{TC})		12.96
number of galaxies		5
number of accordant galaxies		3
median galaxy separation	(kpc)	57.0
radial velocity dispersion	(km/s)	338.9
crossing time	(Ht_c)	0.0126
mass-to-light ratio	($M_\odot/L_\odot$)	229.1

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	31 43.7	31 44.2	31 45.6	31 46.8	31 38.4
δ	(' ")	42 50.9	44 44.8	41 36.2	45 11.5	42 41.1
v	(km/s)	8097	7065	8863	8215	18480
Δv	(km/s)	36	44	74	37	180
T		Sc	Sc	E2	E4	Sab
a	(")	41.10	24.20	12.80	12.70	12.90
b	(")	33.50	9.10	10.00	7.40	9.40
B_{TC}		13.50	14.97	15.69	15.47	16.05
$B-R$		1.01	1.03	1.51	1.19	1.31
$\log F_{60\mu}$	(Jy)	3.90				
$\log F_{100\mu}$	(Jy)	7.78				
$\log F_{20cm}$	(mJy)					
name						

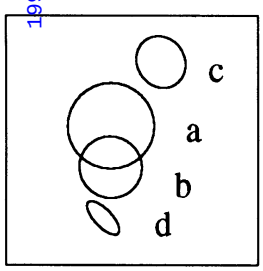


B



R

Group 5



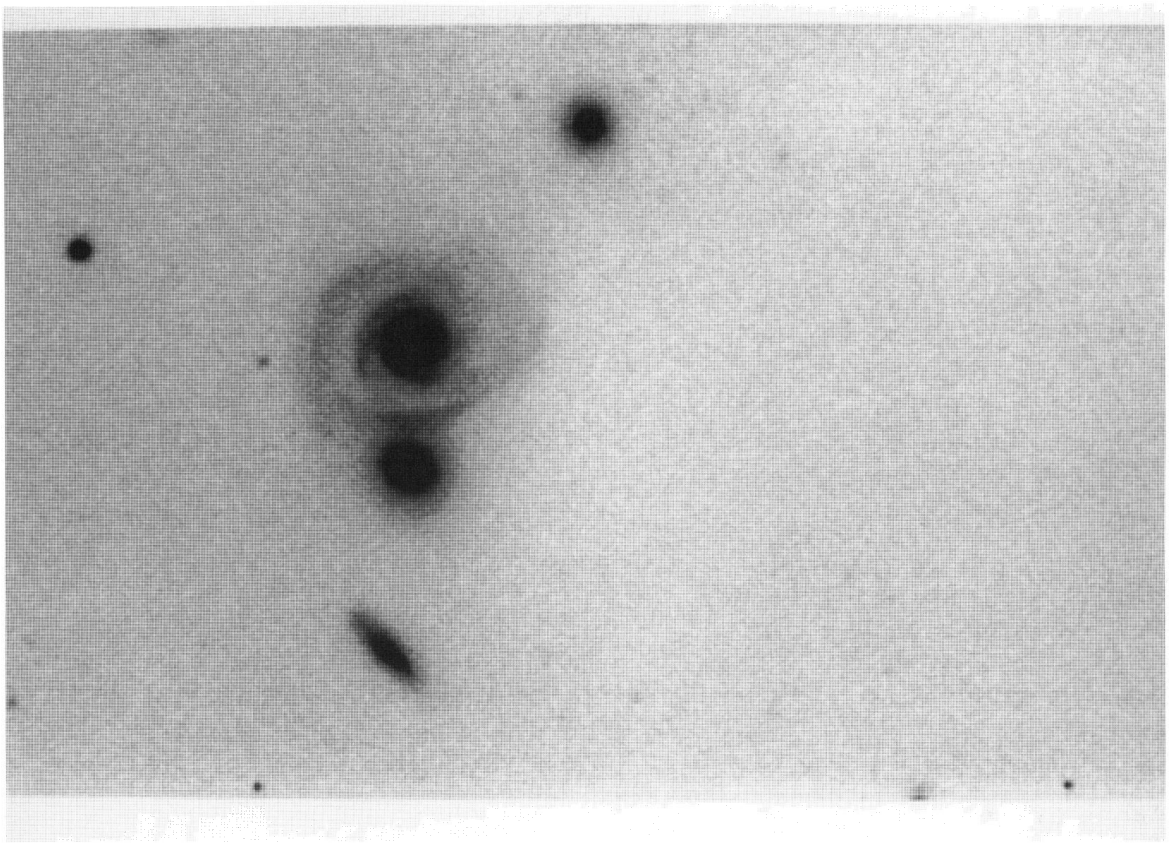
Group 5 contains a compact triplet consisting of the overlapping pair of galaxies NGC190N/S and a nearby companion, plus a small low-redshift galaxy. The triplet has a relatively low velocity dispersion and mass-to-light ratio.

GROUP DATA

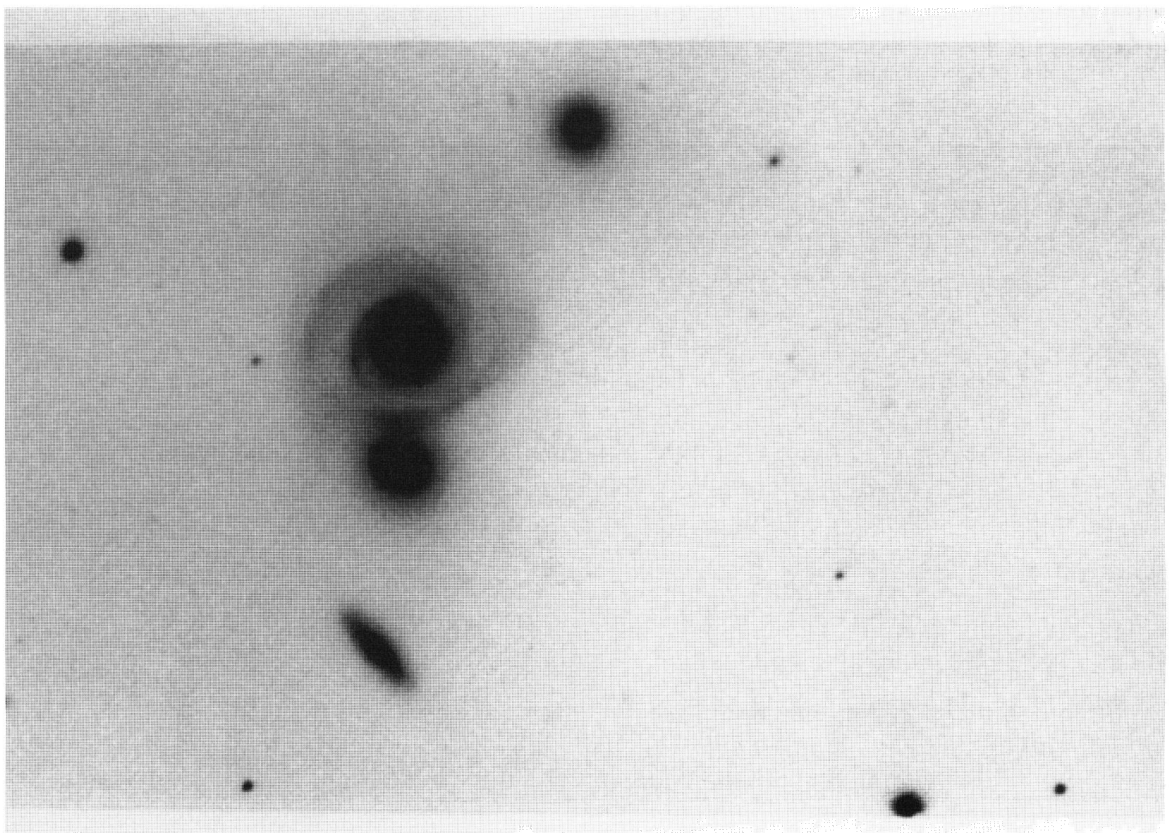
r.a. (1950)	(h m s)	00 36 19.21
dec. (1950)	(° ' ")	+06 47 06.6
galactic longitude	(°)	117.41
galactic latitude	(°)	−55.68
mean redshift		0.0410
total blue magnitude (B_{TC})		13.94
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	25.7
radial velocity dispersion	(km/s)	147.9
crossing time	(Ht_c)	0.0132
mass-to-light ratio	($M_\odot/L_\odot$)	19.95

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	36 19.6	36 19.6	36 17.7	36 19.9
δ	(' ")	47 16.6	46 53.1	47 52.8	46 23.9
v	(km/s)	12147	12221	12489	8215
Δv	(km/s)	34	29	47	37
T		Sab	E0	S0	Sc
a	(")	24.40	17.90	15.10	12.30
b	(")	24.30	17.50	13.40	5.00
B_{TC}		14.55	15.52	16.26	16.72
$B-R$		1.58	2.03	1.72	1.68
$\log F_{12\mu}$	(Jy)				
$\log F_{60\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		N190N	N190S		

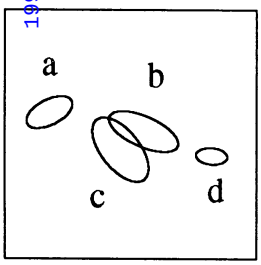


B



R

Group 6



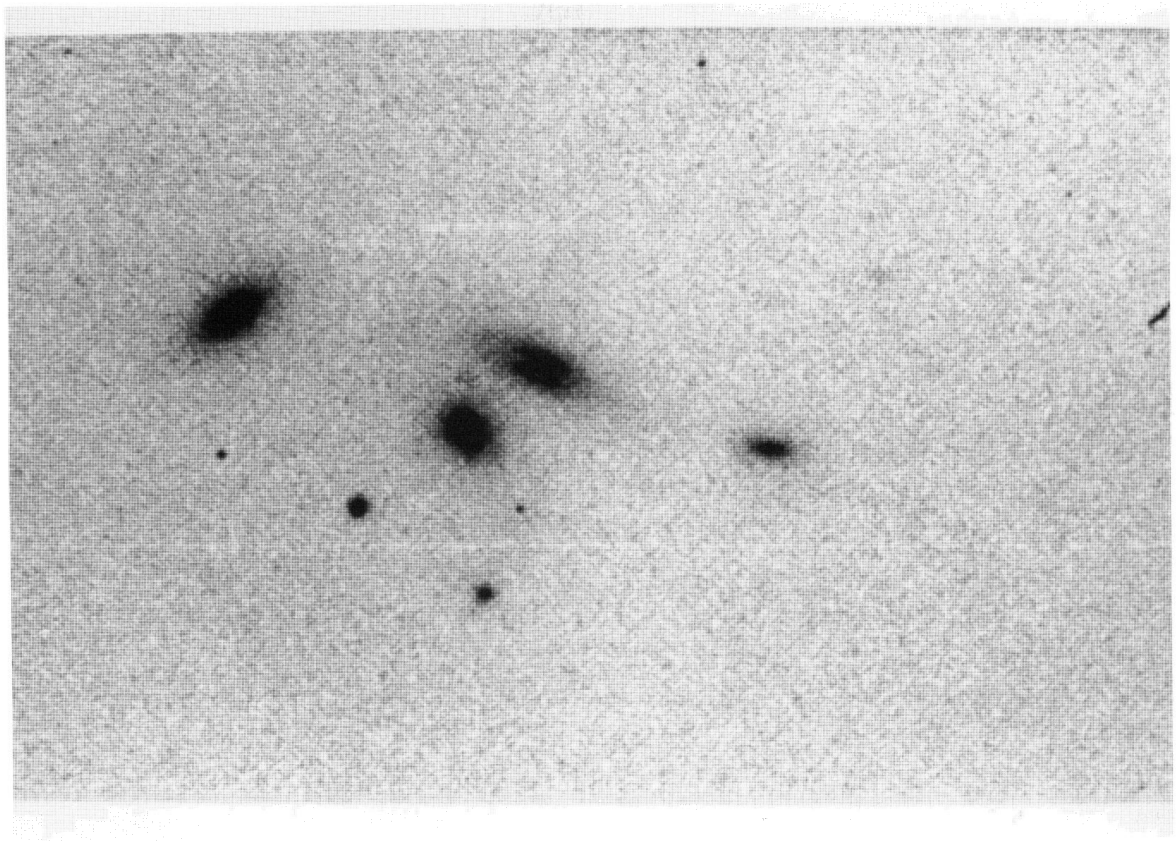
Group 6 contains three galaxies of almost equal magnitude plus a fainter galaxy and several objects below the three magnitude cutoff. It is a small group with a short crossing time.

GROUP DATA

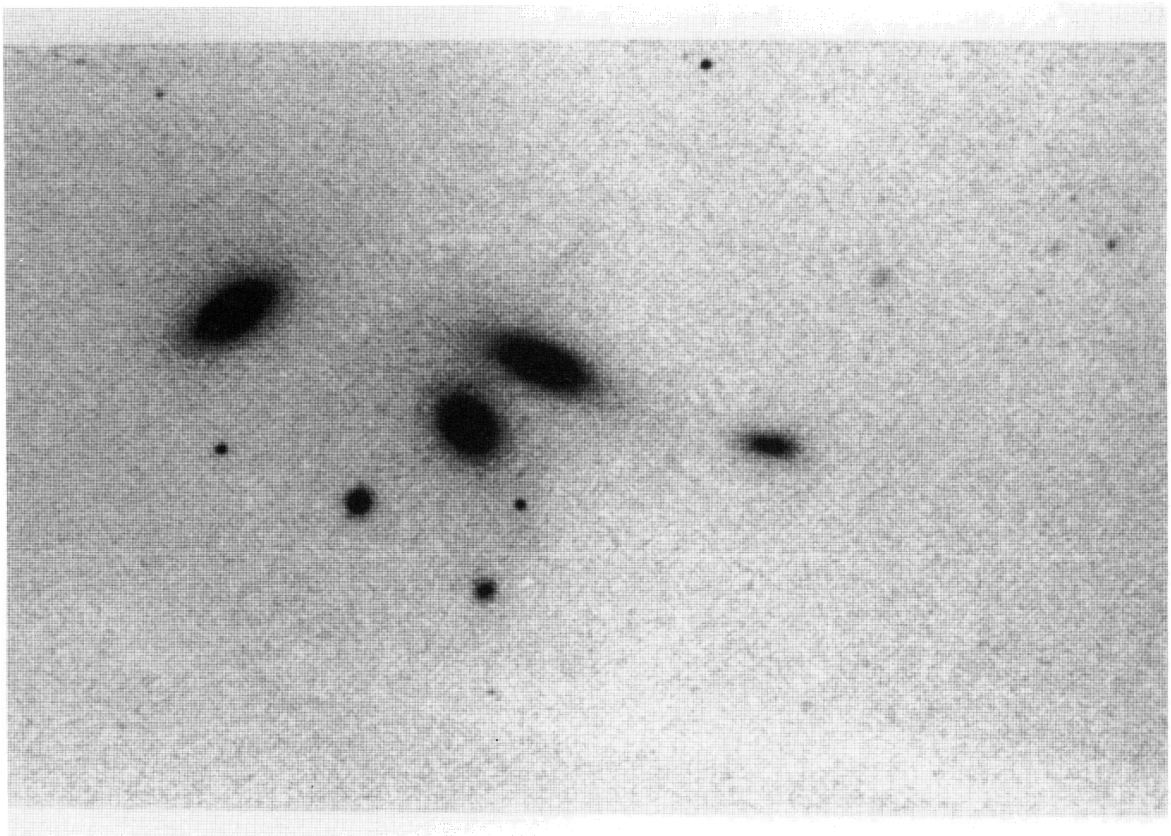
r.a. (1950)	(h m s)	00 36 38.57
dec. (1950)	(° ' ")	−08 40 22.0
galactic longitude	(°)	113.56
galactic latitude	(°)	−71.05
mean redshift		0.0379
total blue magnitude (B_{TC})		14.12
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	25.1
radial velocity dispersion	(km/s)	251.2
crossing time	(Ht_c)	0.0076
mass-to-light ratio	($M_\odot/L_\odot$)	60.2

GALAXY DATA

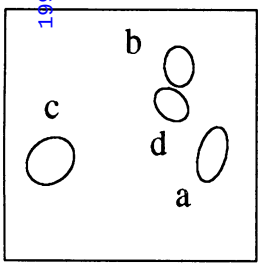
Galaxy:		a	b	c	d
α	(m s)	36 41.7	36 38.1	36 39.0	36 35.5
δ	(' ")	40 07.7	40 18.6	40 29.1	40 32.7
v	(km/s)	11669	11377	10967	11434
Δv	(km/s)	52	61	61	62
T		S0a	Sab	E5	Sbc
a	(")	14.30	21.20	21.90	9.00
b	(")	7.30	8.70	11.00	4.80
B_{TC}		15.27	15.50	15.37	17.19
$B-R$		1.62	1.74	1.64	1.39
$\log F_{12\mu}$	(Jy)				
$\log F_{60\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 7



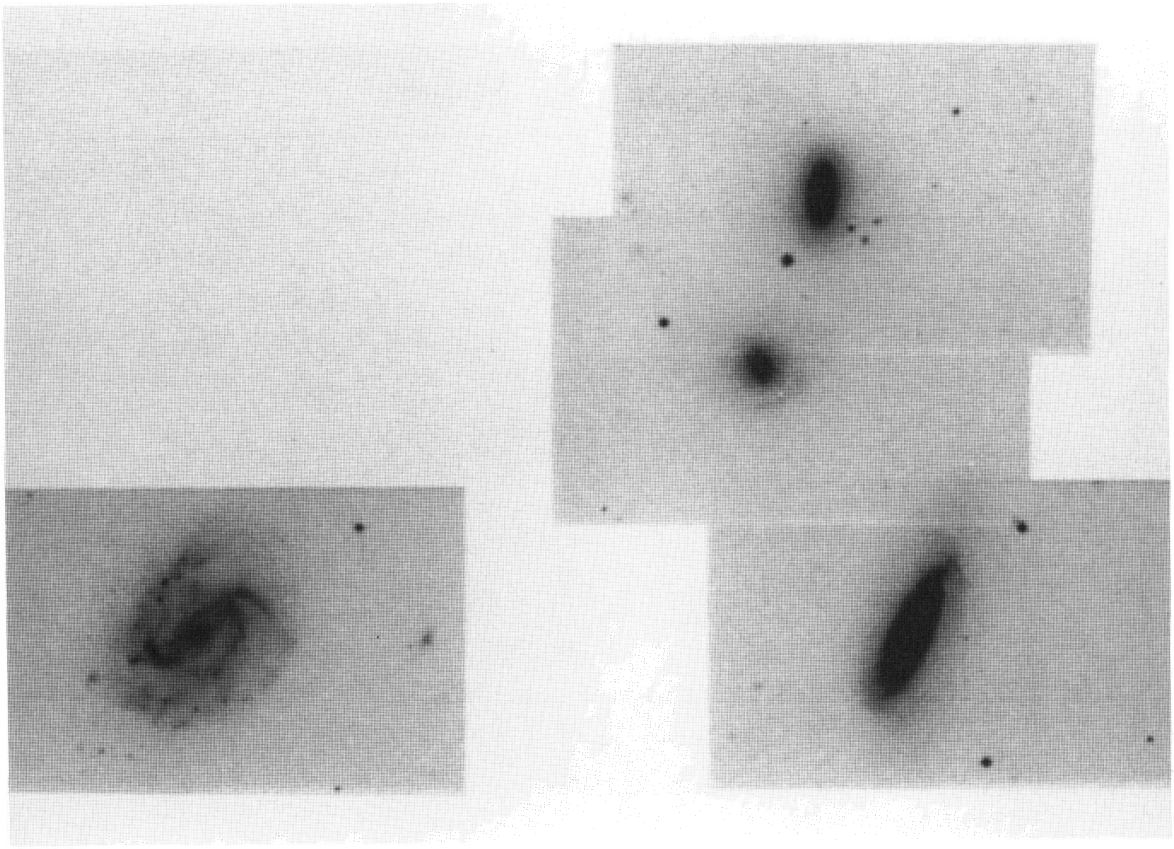
This nearby group consists of four bright NGC spiral galaxies, all of which show morphological signs of interaction. Both the velocity dispersion and estimated mass-to-light ratio of this group are relatively low. The brightest galaxy is an infrared and radio source.

GROUP DATA

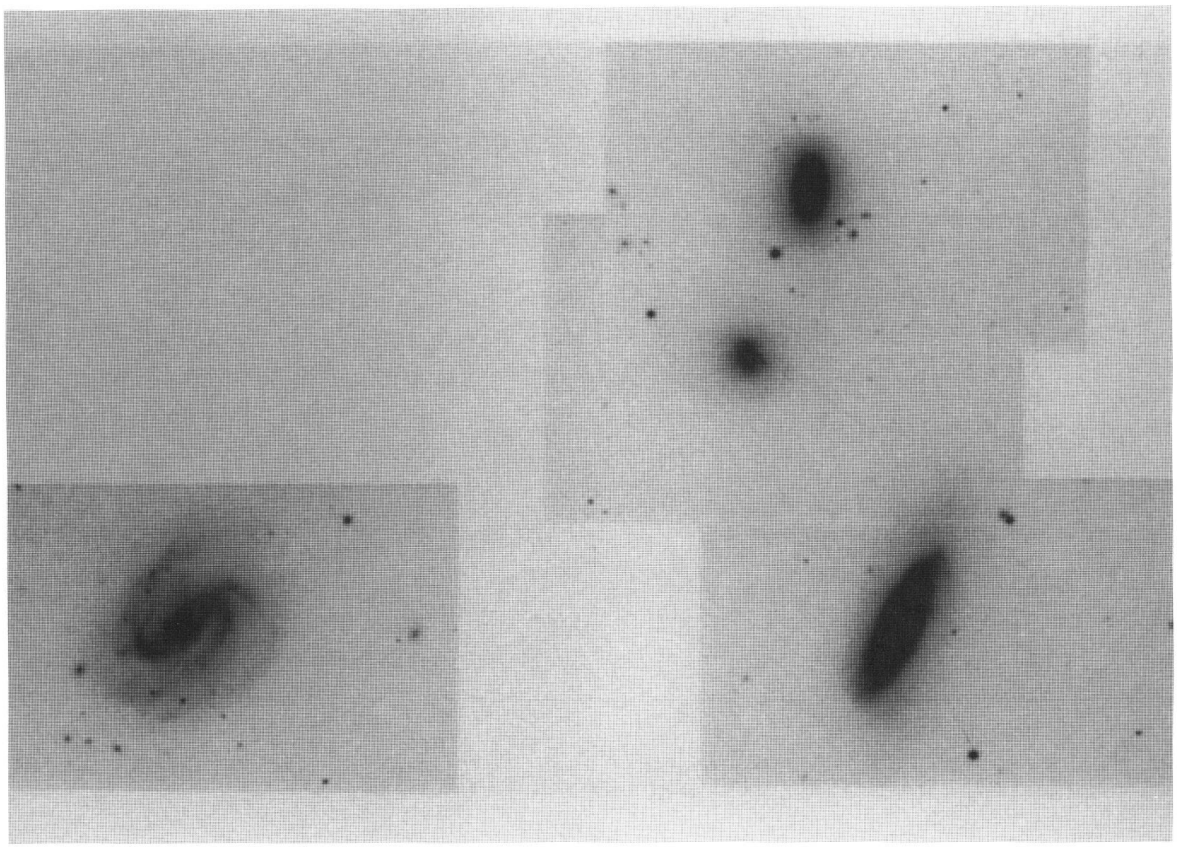
r.a. (1950)	(h m s)	00 36 47.51
dec. (1950)	(° ' ")	+00 36 26.2
galactic longitude	(°)	116.52
galactic latitude	(°)	−61.84
mean redshift		0.0141
total blue magnitude (B_{TC})		11.75
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	45.6
radial velocity dispersion	(km/s)	89.1
crossing time	(Ht_c)	0.0398
mass-to-light ratio	($M_\odot/L_\odot$)	14.1

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	36 39.7	36 44.1	37 01.2	36 45.1
δ	(' ")	35 20.5	38 17.3	35 06.3	37 00.8
v	(km/s)	4210	4238	4366	4116
Δv	(km/s)	20	25	36	38
T		Sb	SB0	SBc	SBc
a	(")	56.80	40.10	52.30	38.30
b	(")	27.60	29.20	42.60	27.90
B_{TC}		12.98	13.74	12.60	14.77
$B-R$		1.48	1.44	1.19	1.12
$\log F_{60\mu}$	(Jy)	3.23			
$\log F_{100\mu}$	(Jy)	5.99			
$\log F_{20cm}$	(mJy)	5.74			
name		N192	N196	N201	N197

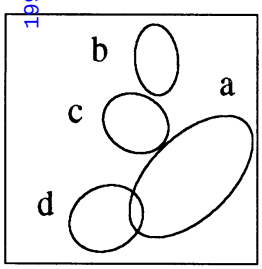


B



R

Group 8



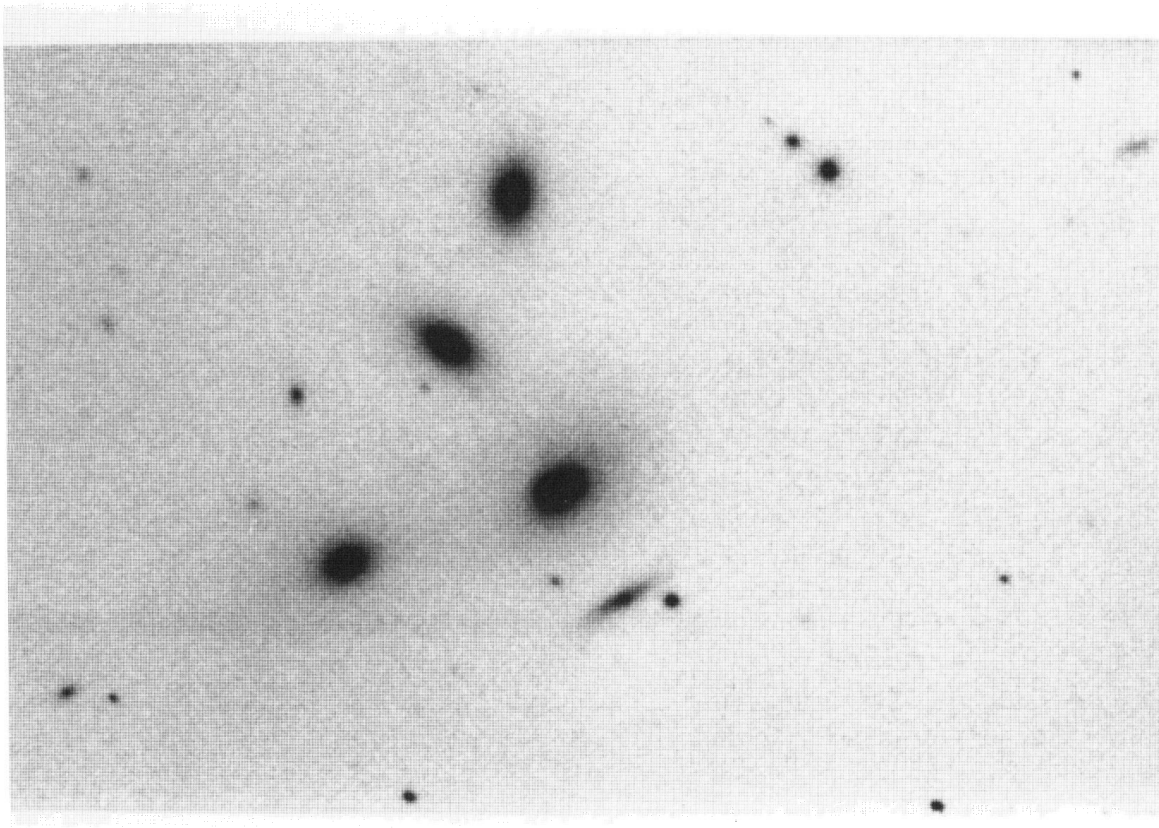
This anonymous quartet contains three compact S0 galaxies and an elliptical galaxy that is about a magnitude brigher. It is a rather compact group with a high velocity dispersion.

GROUP DATA

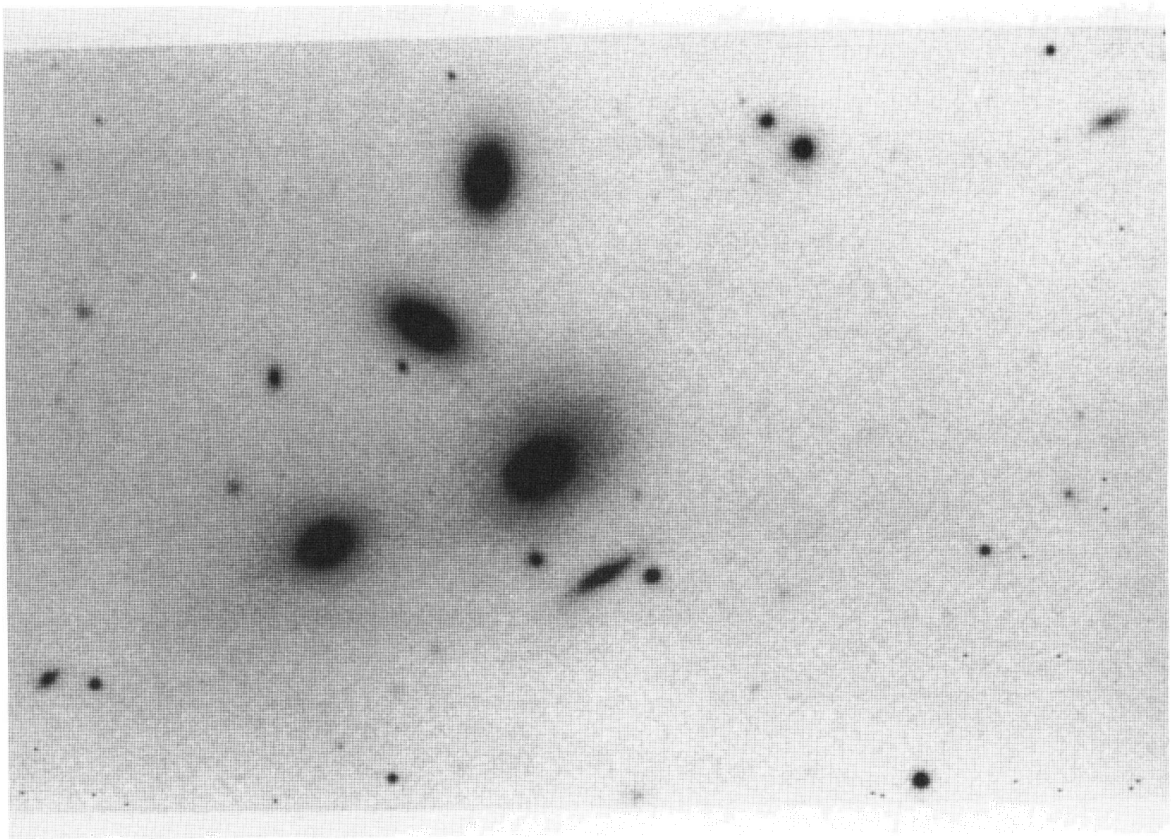
r.a. (1950)	(h m s)	00 46 55.78
dec. (1950)	(° ' ")	+23 18 33.2
galactic longitude	(°)	122.39
galactic latitude	(°)	−39.29
mean redshift		0.0545
total blue magnitude (B_{TC})		13.58
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	28.8
radial velocity dispersion	(km/s)	446.7
crossing time	(Ht_c)	0.0048
mass-to-light ratio	($M_\odot/L_\odot$)	53.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	46 54.5	46 55.5	46 56.1	46 57.0
δ	(' ")	18 20.0	19 08.2	18 41.9	18 02.7
v	(km/s)	16014	15966	17087	16341
Δv	(km/s)	51	38	51	39
T		E5	S0	S0	S0
a	(")	31.50	14.70	13.90	15.60
b	(")	16.60	8.80	11.80	13.10
B_{TC}		14.50	15.41	15.33	15.42
$B-R$		1.76	1.82	1.81	1.76
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

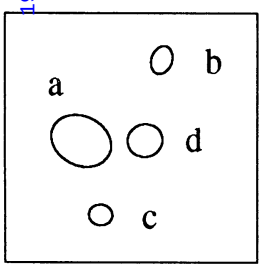


B



R

Group 9



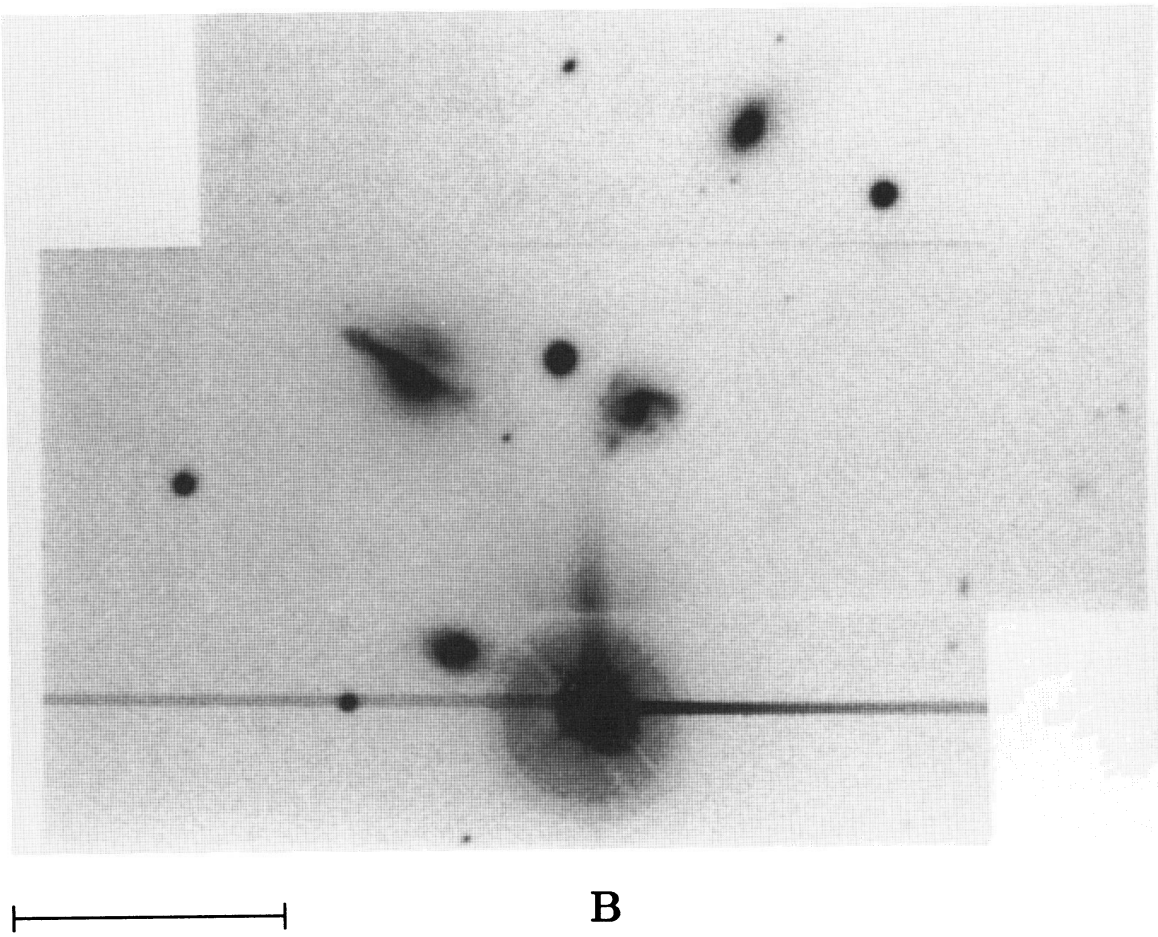
Group 9 contains four galaxies all with disparate redshifts. Galaxies b and c have the smallest redshift difference, but even this corresponds to a radial velocity difference of almost 900 km s^{-1}. It is assumed that these galaxies are not physically related.

GROUP DATA

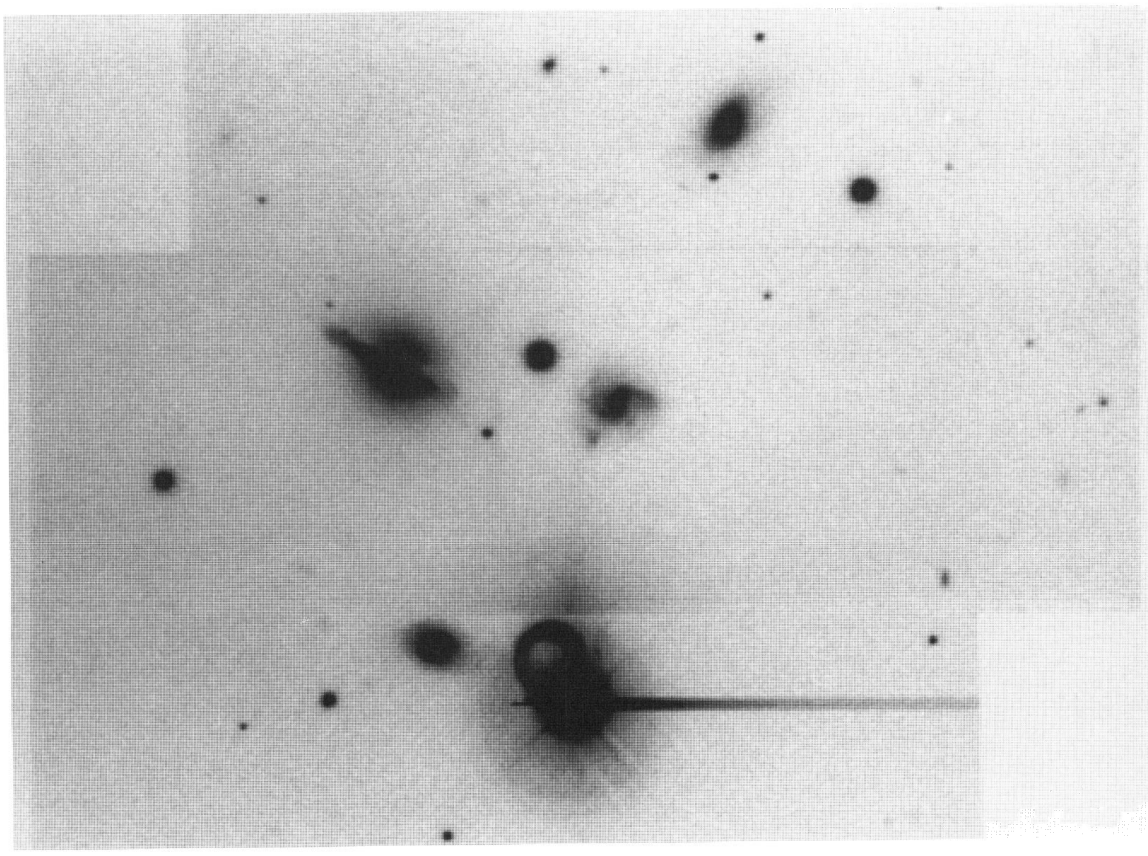
r.a. (1950)	(h m s)	00 51 51.32
dec. (1950)	(° ' ")	−23 49 23.7
galactic longitude	(°)	133.36
galactic latitude	(°)	−86.37
mean redshift		
total blue magnitude (B_{TC})		14.13
number of galaxies		4
number of accordant galaxies		0
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	51 53.6	51 49.2	51 52.5	51 50.1
δ	(' ")	49 25.2	48 23.1	50 21.5	49 24.9
v	(km/s)	20155	9406	10300	17726
Δv	(km/s)	125	150	192	193
T		E2	S0	Sc	SBcd
a	(")	23.60	11.10	9.00	13.30
b	(")	18.70	7.90	7.90	12.50
B_{TC}		14.89	15.50	16.56	16.49
$B-R$		1.60	1.11	1.34	1.09
$\log F_{60\mu}$	(Jy)	0.58			
$\log F_{100\mu}$	(Jy)	1.27			
$\log F_{20cm}$	(mJy)				
name					

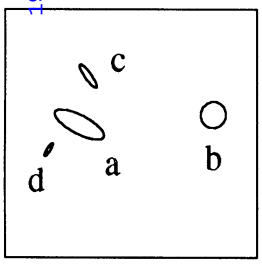


B



R

Group 10



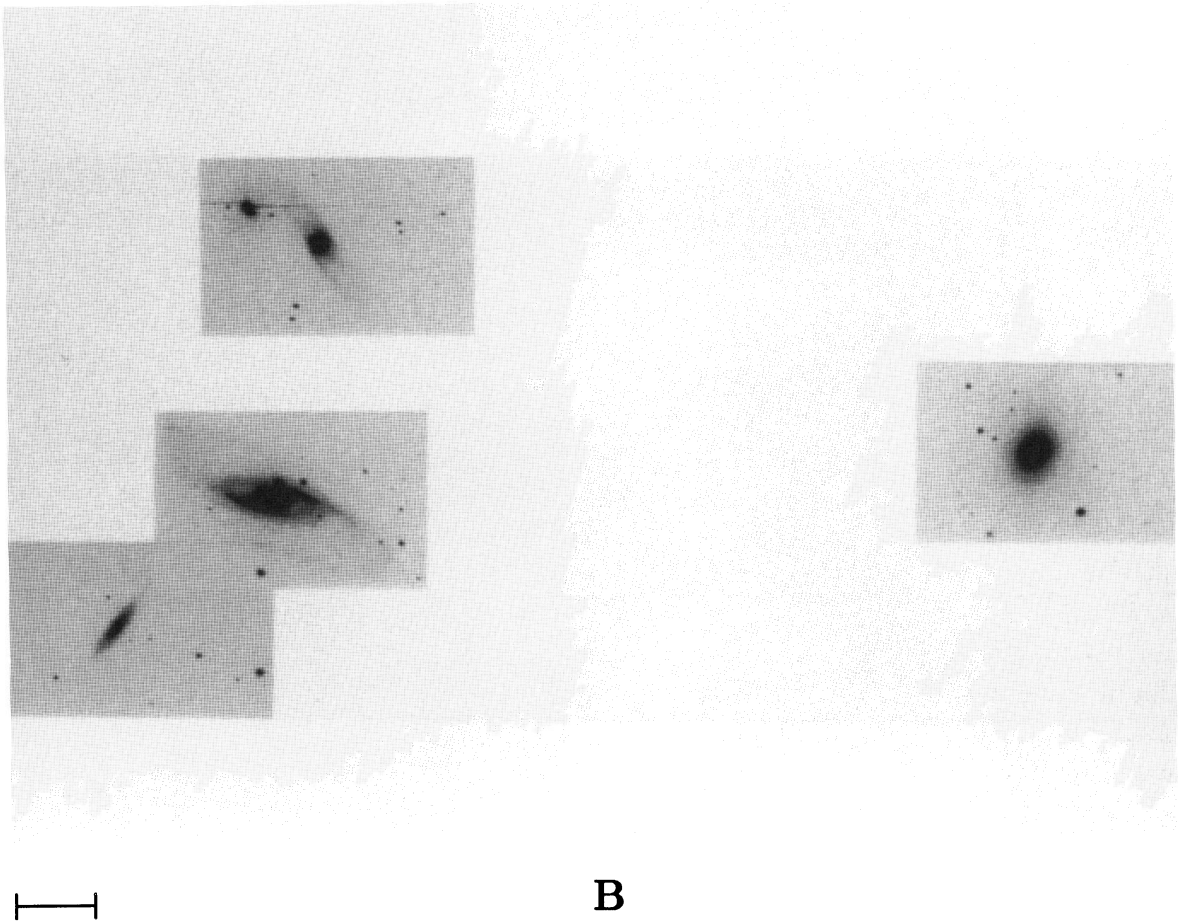
This is a rather loose group of nearby bright galaxies. The spiral galaxies (a, b and c) have extended spiral arms typical of interacting galaxies.

GROUP DATA

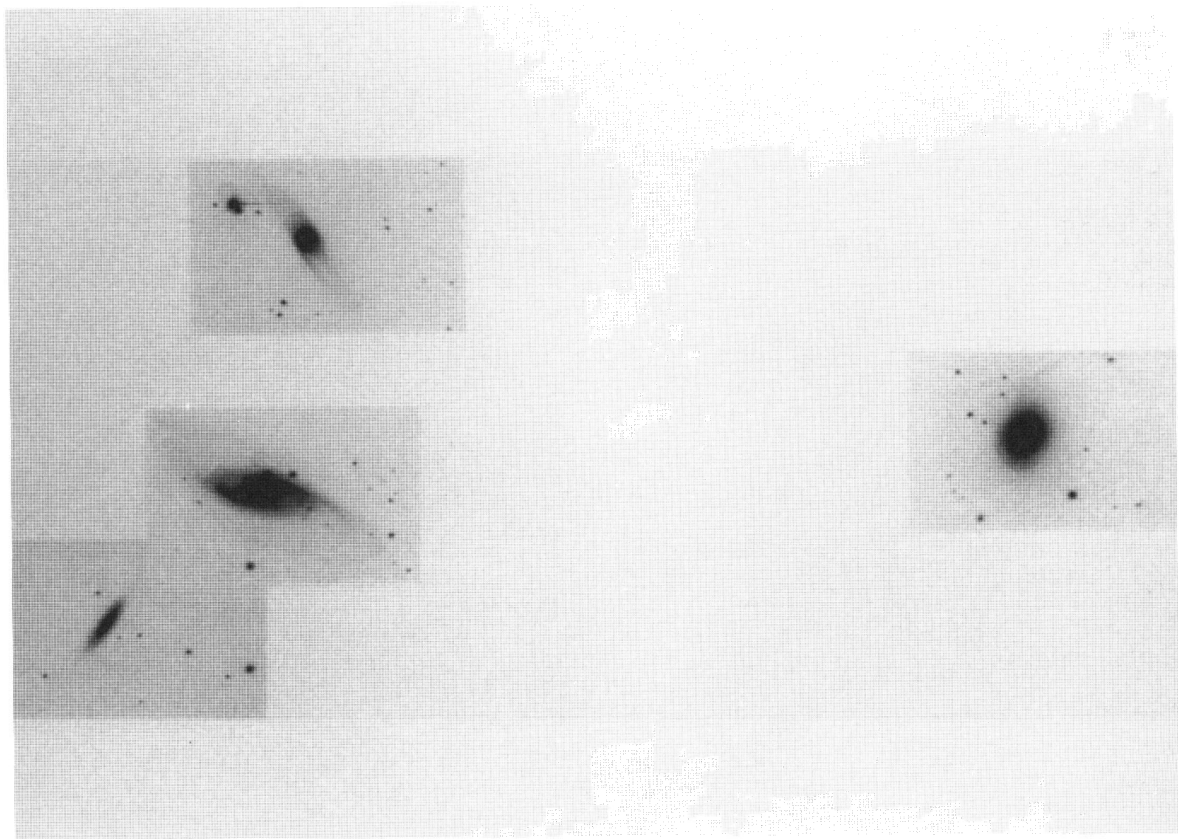
r.a. (1950)	(h m s)	01 23 22.47
dec. (1950)	(° ' ")	+34 27 05.2
galactic longitude	(°)	130.99
galactic latitude	(°)	−27.62
mean redshift		0.0161
total blue magnitude (B_{TC})		11.70
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	92.9
radial velocity dispersion	(km/s)	208.9
crossing time	(Ht_c)	0.0331
mass-to-light ratio	($M_\odot/L_\odot$)	77.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	23 31.0	22 50.1	23 28.4	23 40.4
δ	(' ")	26 33.3	27 11.1	29 40.1	24 56.5
v	(km/s)	5148	4862	4660	4620
Δv	(km/s)	19	22	32	40
T		SBb	E1	Sc	Scd
a	(")	104.80	51.20	55.40	29.20
b	(")	35.90	48.00	12.90	7.30
B_{TC}		12.62	12.70	14.07	14.69
$B-R$		1.56	1.57	1.66	1.52
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		N536	N529	N531	N542

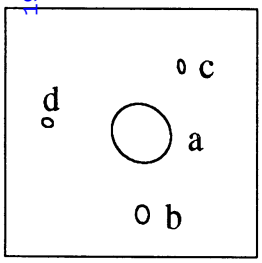


B



R

Group 11



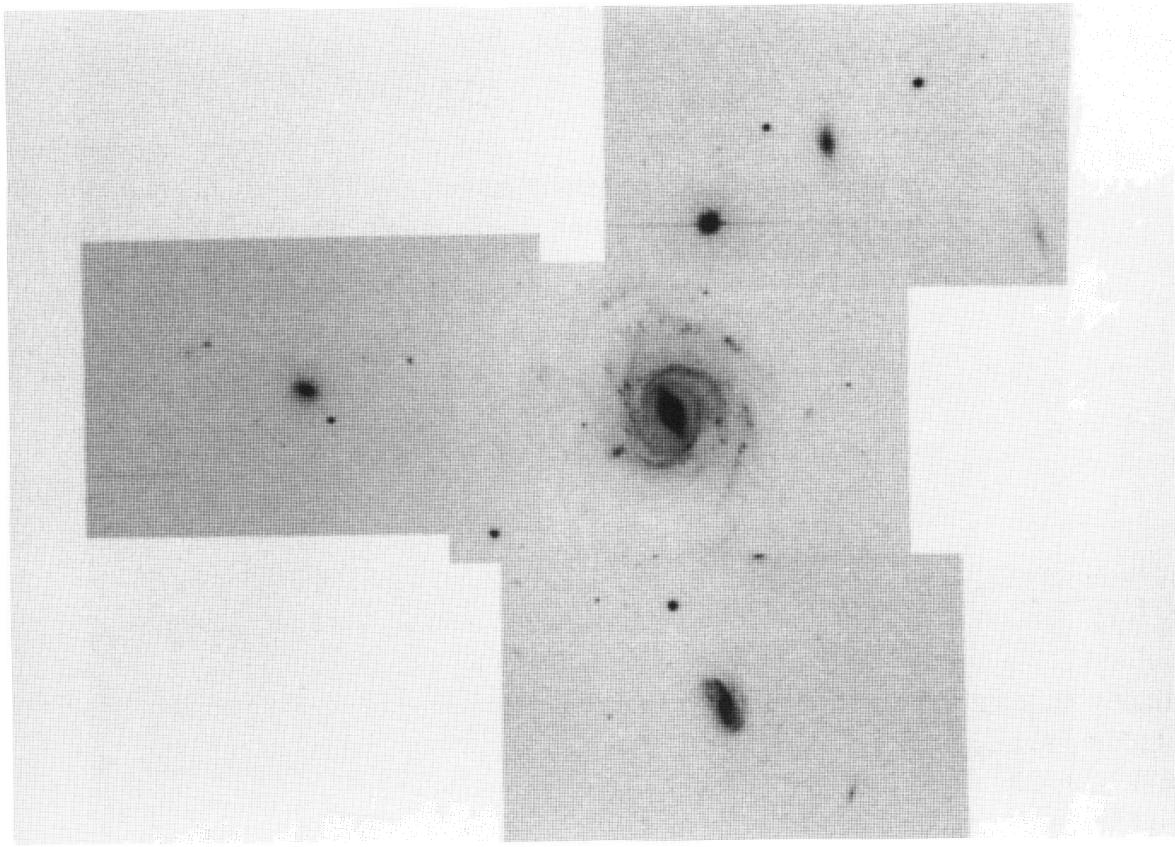
Group 11 is comprised of one low-redshift spiral galaxy surrounded by three small satellites all of which have much higher redshifts. It is assumed that this group is a chance alignment and not a physical system.

GROUP DATA

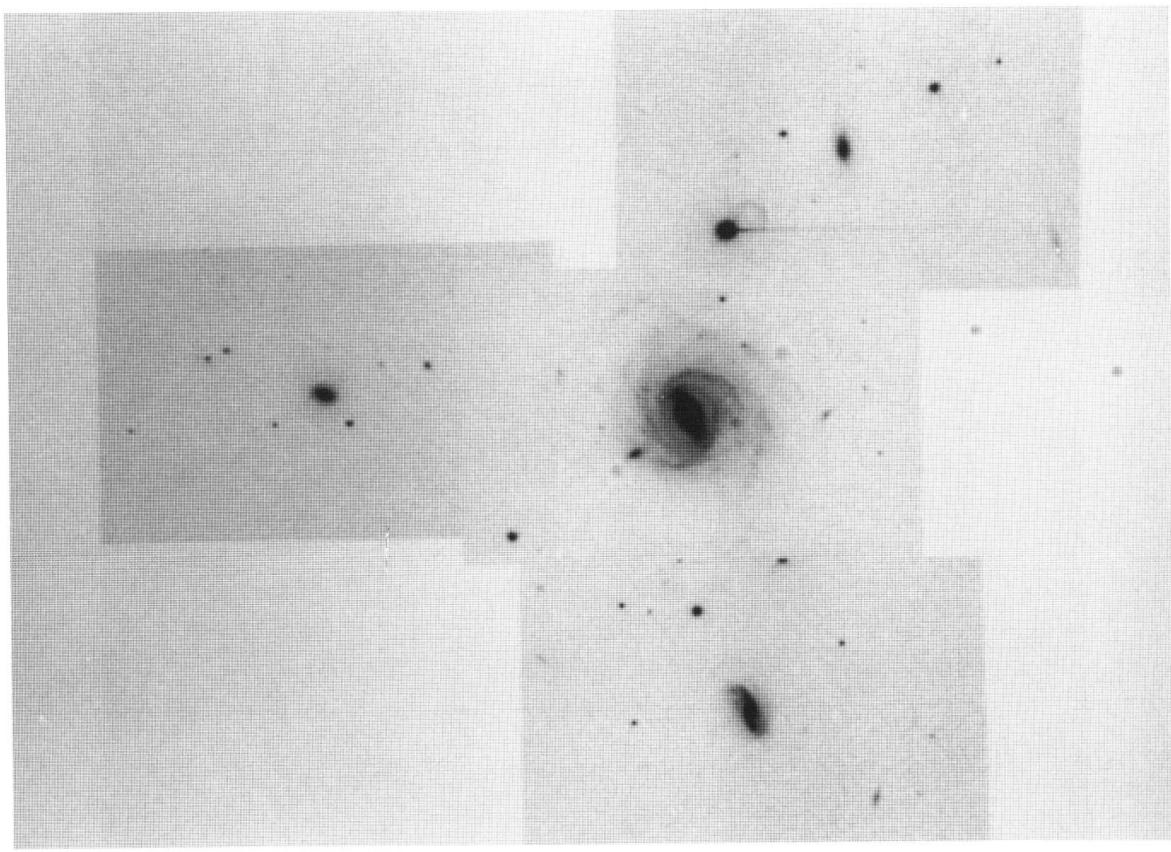
r.a. (1950)	(h m s)	01 24 12.45
dec. (1950)	(° ' ")	-23 29 09.6
galactic longitude	(°)	188.73
galactic latitude	(°)	-81.14
mean redshift		
total blue magnitude (B_{TC})		12.78
number of galaxies		4
number of accordant galaxies		0
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

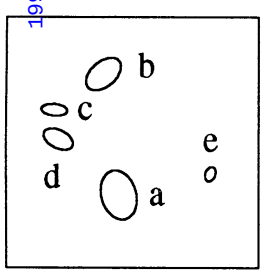
Galaxy:		a	b	c	d
α	(m s)	24 10.8	24 10.7	24 05.8	24 22.5
δ	(' ")	29 07.6	31 29.8	27 11.0	28 50.0
v	(km/s)	5504	13295	12904	9686
Δv	(km/s)	33	86	61	61
T		SBbc	SBc	Scd	SB0
a	(")	53.90	15.60	11.60	9.60
b	(")	48.50	11.20	5.80	7.60
B_{TC}		12.97	15.30	16.56	16.55
$B-R$		1.22	1.15	1.20	1.39
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)	1.24			
$\log F_{20cm}$	(mJy)				
name					



B



Group 12



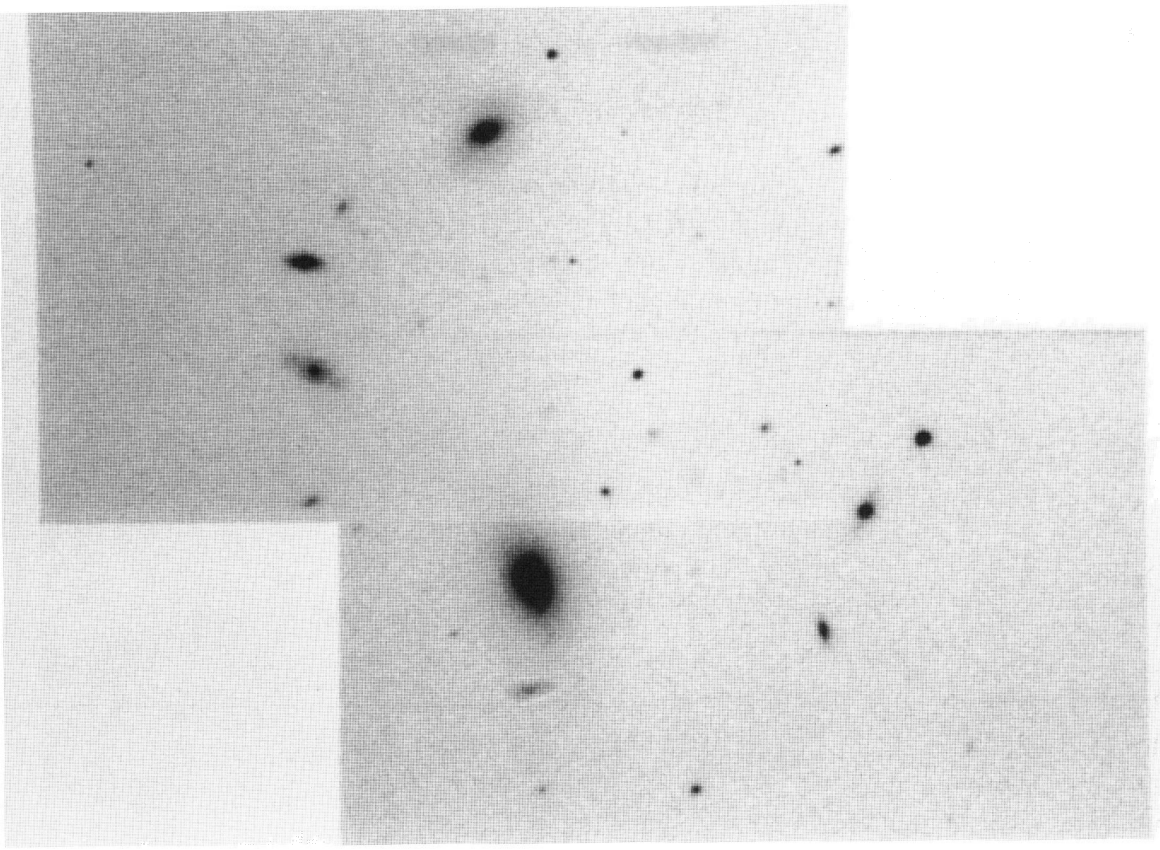
This group is an accordant quintet of mostly S0 type galaxies. It is moderately compact and has intermediate dynamical properties.

GROUP DATA

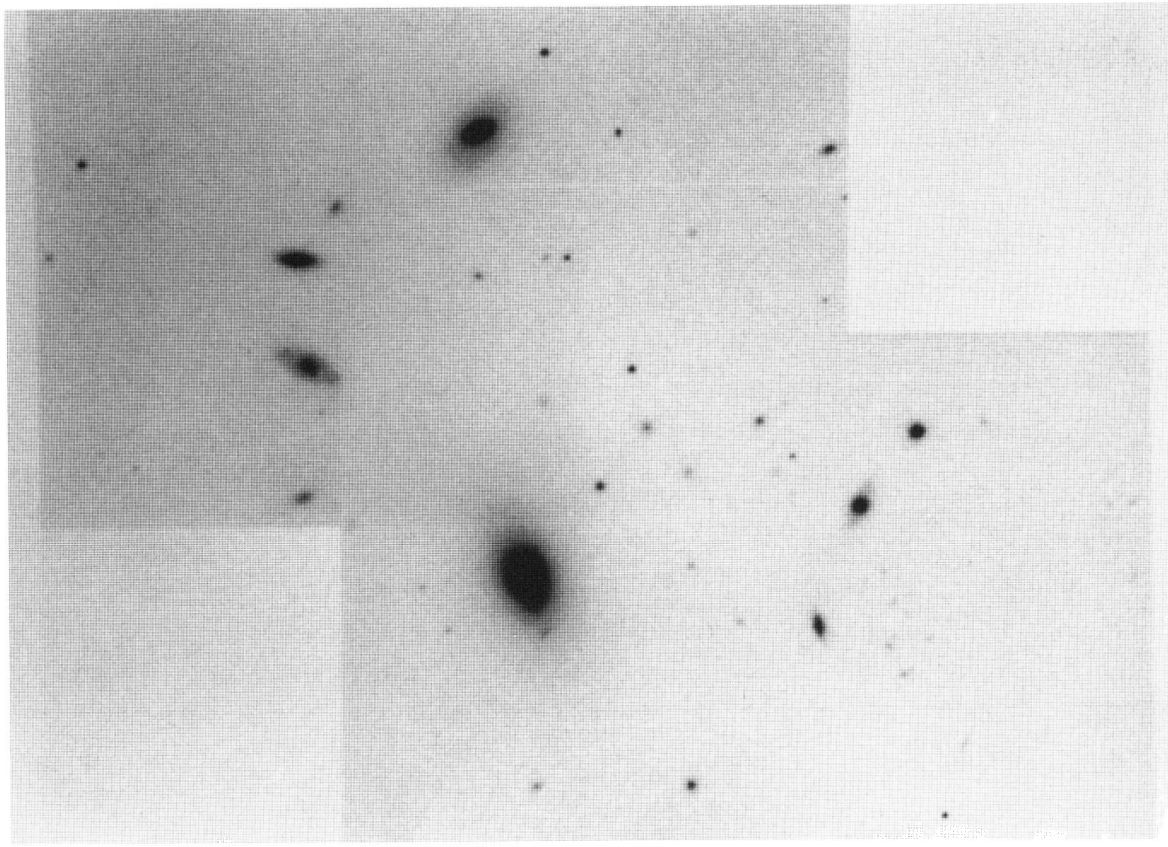
r.a. (1950)	(h m s)	01 25 02.38
dec. (1950)	(° ' ")	-04 55 38.5
galactic longitude	(°)	145.51
galactic latitude	(°)	-65.94
mean redshift		0.0485
total blue magnitude (B_{TC})		14.36
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	239.9
crossing time	(Ht_c)	0.0186
mass-to-light ratio	($M_\odot/L_\odot$)	74.1

GALAXY DATA

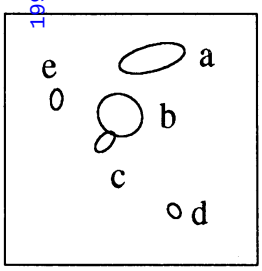
Galaxy:		a	b	c	d	e
α	(m s)	25 01.8	25 02.7	25 05.7	25 05.5	24 56.2
δ	(' ")	56 30.2	54 39.7	55 12.6	55 39.2	56 11.0
v	(km/s)	14407	14956	14569	14241	14469
Δv	(km/s)	53	38	66	62	62
T		S0	SB0	S0	Sbc	S0
a	(")	22.90	18.70	12.00	14.50	6.80
b	(")	15.90	11.60	5.40	8.30	4.60
B_{TC}		14.82	16.29	17.30	17.21	17.98
$B-R$		1.71	1.76	1.74	1.74	1.68
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name						



B



Group 13



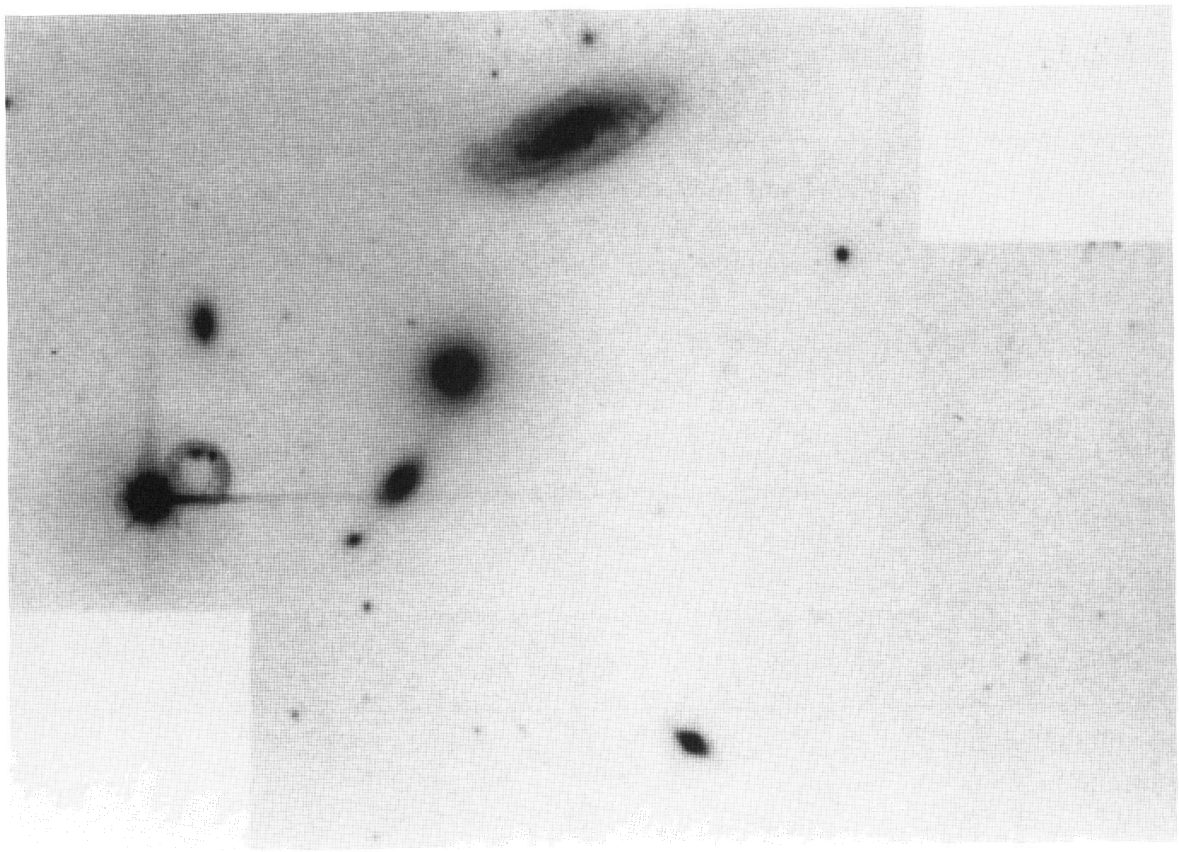
Group 13 contains a bright spiral and elliptical galaxy plus three small compact S0 galaxies. The elliptical galaxy is a radio source. The group has close to average dynamical properties.

GROUP DATA

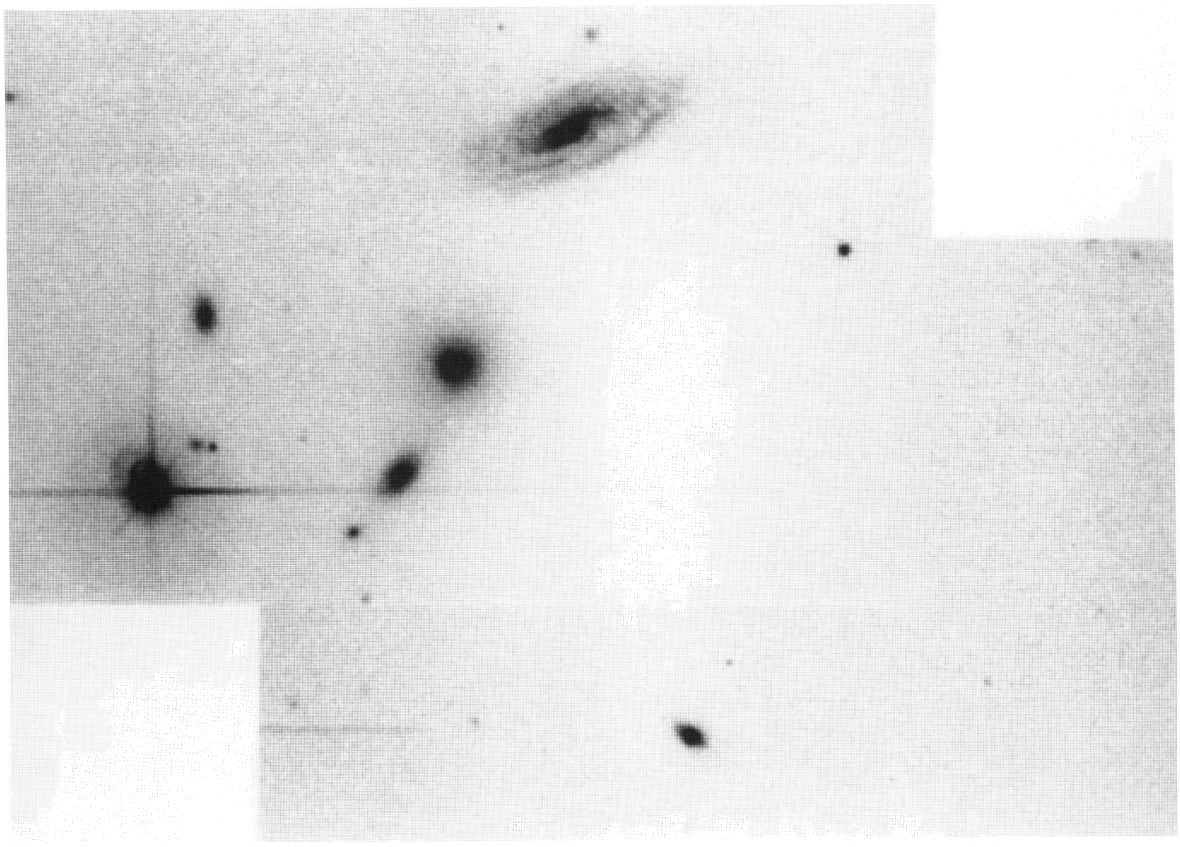
r.a. (1950)	(h m s)	01 29 52.29
dec. (1950)	(° ' ")	-08 -7 59.4
galactic longitude	(°)	151.55
galactic latitude	(°)	-68.44
mean redshift		0.0411
total blue magnitude (B_{TC})		13.89
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	46.8
radial velocity dispersion	(km/s)	182.0
crossing time	(Ht_c)	0.0219
mass-to-light ratio	($M_\odot/L_\odot$)	38.9

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	29 50.5	29 52.4	29 53.3	29 49.2	29 56.1
δ	(' ")	07 01.0	07 50.9	08 14.4	09 13.6	07 37.2
v	(km/s)	12469	12100	12240	12209	12593
Δv	(km/s)	42	101	105	107	61
T		SBab	E0	S0	S0	S0
a	(")	29.10	19.90	10.80	6.80	9.10
b	(")	11.30	18.00	5.80	4.80	5.00
B_{TC}		14.61	15.25	16.24	17.47	17.28
$B-R$		1.80	1.80	1.71	1.64	1.61
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)		3.25			
name						

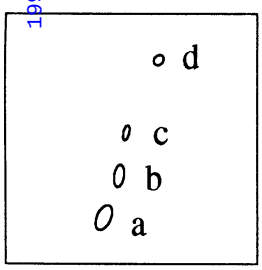


B



R

Group 14



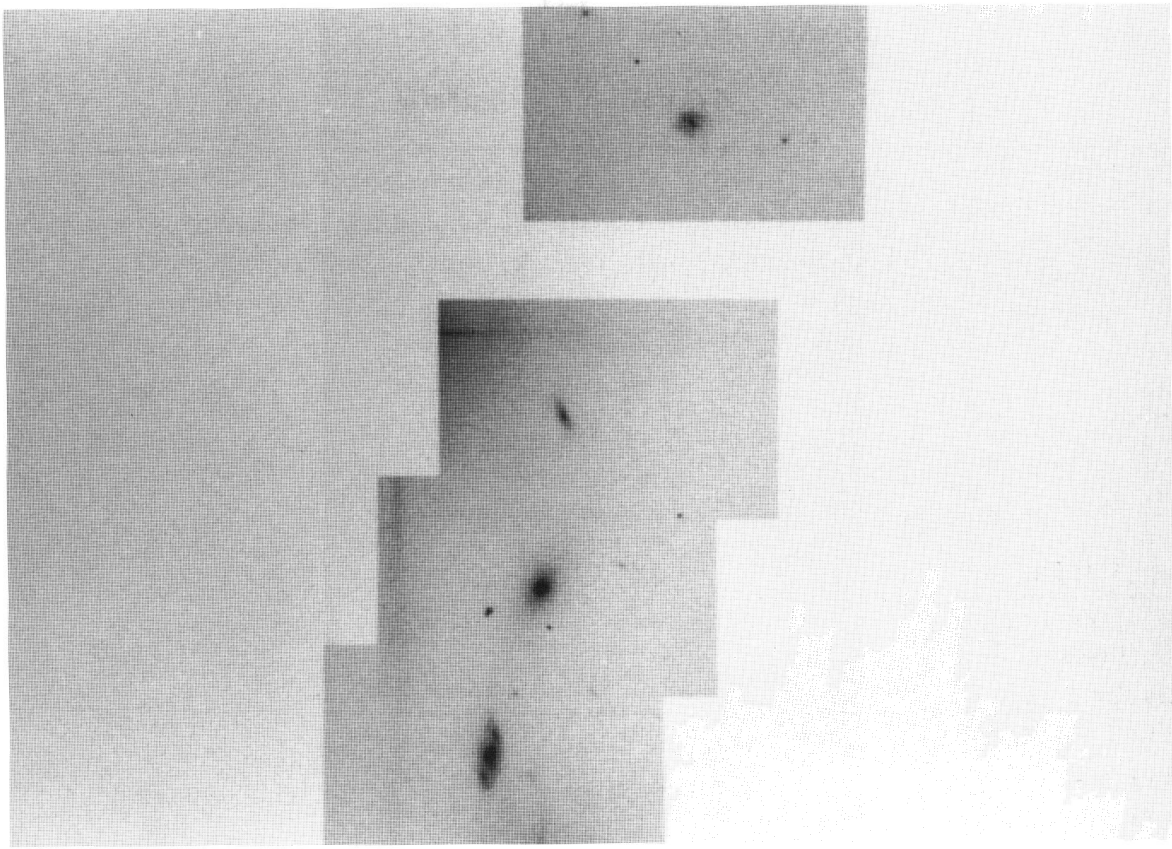
Group 14 consists of an interacting triplet and a smaller, isolated galaxy of significantly higher redshift. The triplet has a relatively high velocity dispersion and a short crossing time.

GROUP DATA

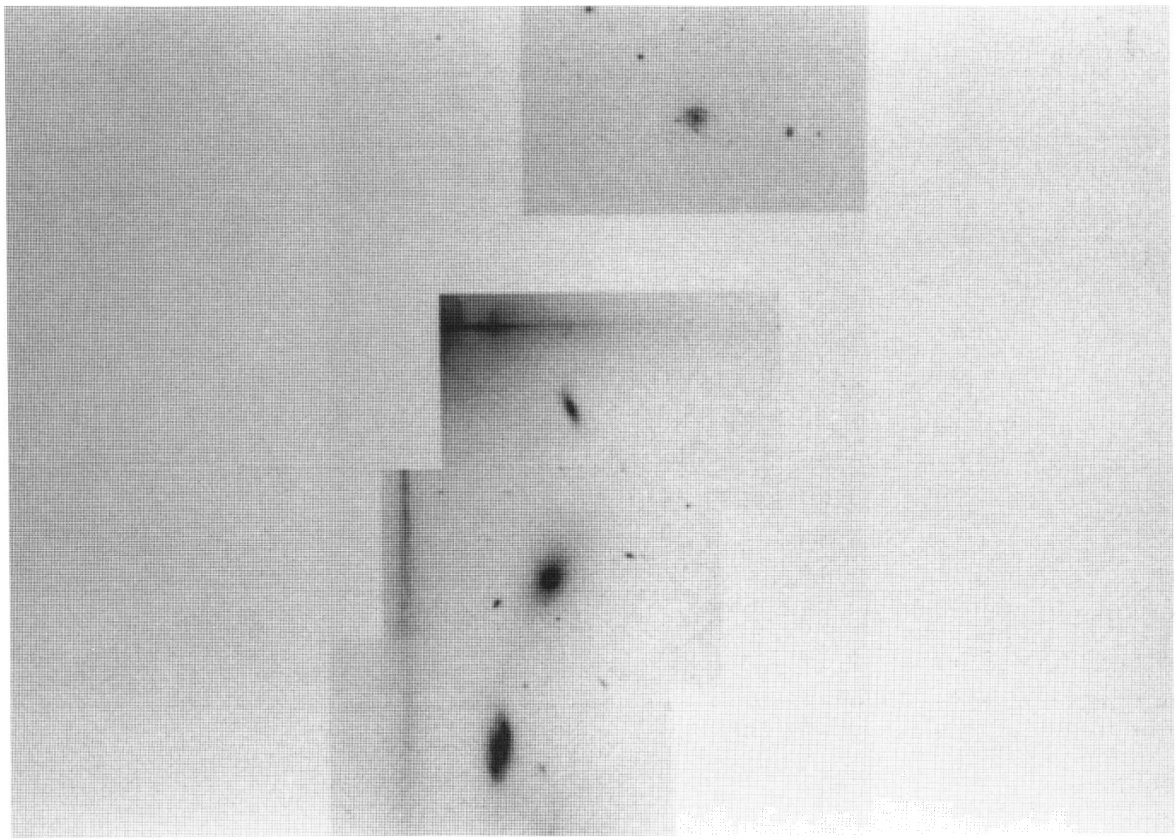
r.a. (1950)	(h m s)	01 57 18.98
dec. (1950)	(° ' ")	-07 16 54.3
galactic longitude	(°)	164.98
galactic latitude	(°)	-64.18
mean redshift		0.0183
total blue magnitude (B_{TC})		13.51
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	26.9
radial velocity dispersion	(km/s)	331.1
crossing time	(Ht_c)	0.0060
mass-to-light ratio	($M_\odot/L_\odot$)	602.6

GALAXY DATA

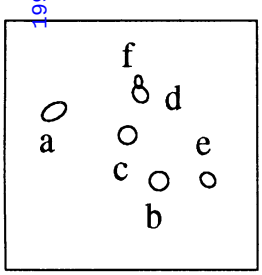
Galaxy:		a	b	c	d
α	(m s)	57 20.2	57 22.7	57 19.1	57 14.0
δ	(' ")	18 04.0	19 42.5	16 22.1	13 28.5
v	(km/s)	5929	5365	5145	8416
Δv	(km/s)	35	28	37	58
T		Sb	E5	Sbc	Sd
a	(")	26.80	30.80	18.00	13.20
b	(")	11.60	16.70	7.30	10.70
B_{TC}		14.77	14.17	16.58	16.16
$B-R$		1.86	1.54	1.94	1.15
$\log F_{60\mu}$	(Jy)		0.79		
$\log F_{100\mu}$	(Jy)		1.79		
$\log F_{6cm}$	(mJy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 15



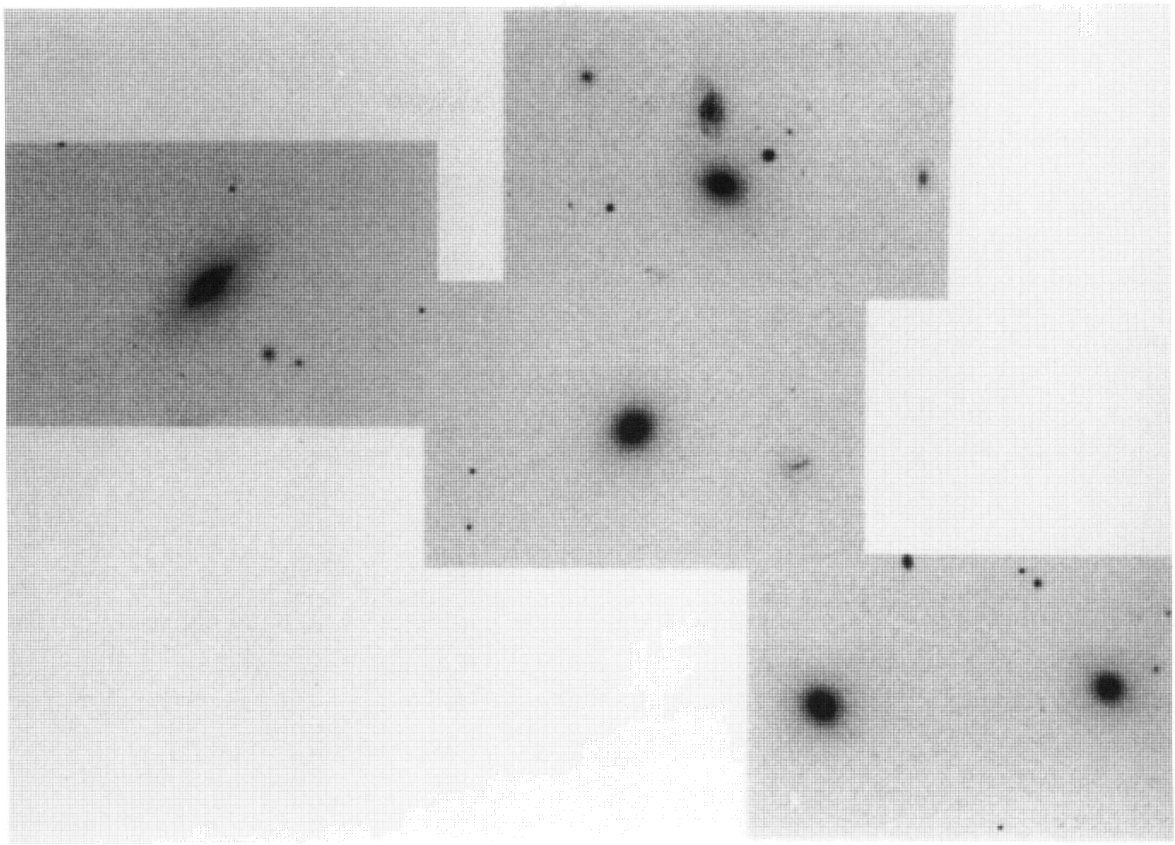
This group is a relatively loose sextet of early and late type galaxies. Its high velocity dispersion contributes to the unusually high indicated mass-to-light ratio. The group contains two radio sources, the brightest galaxy (a) and galaxy d, which is interacting with f.

GROUP DATA

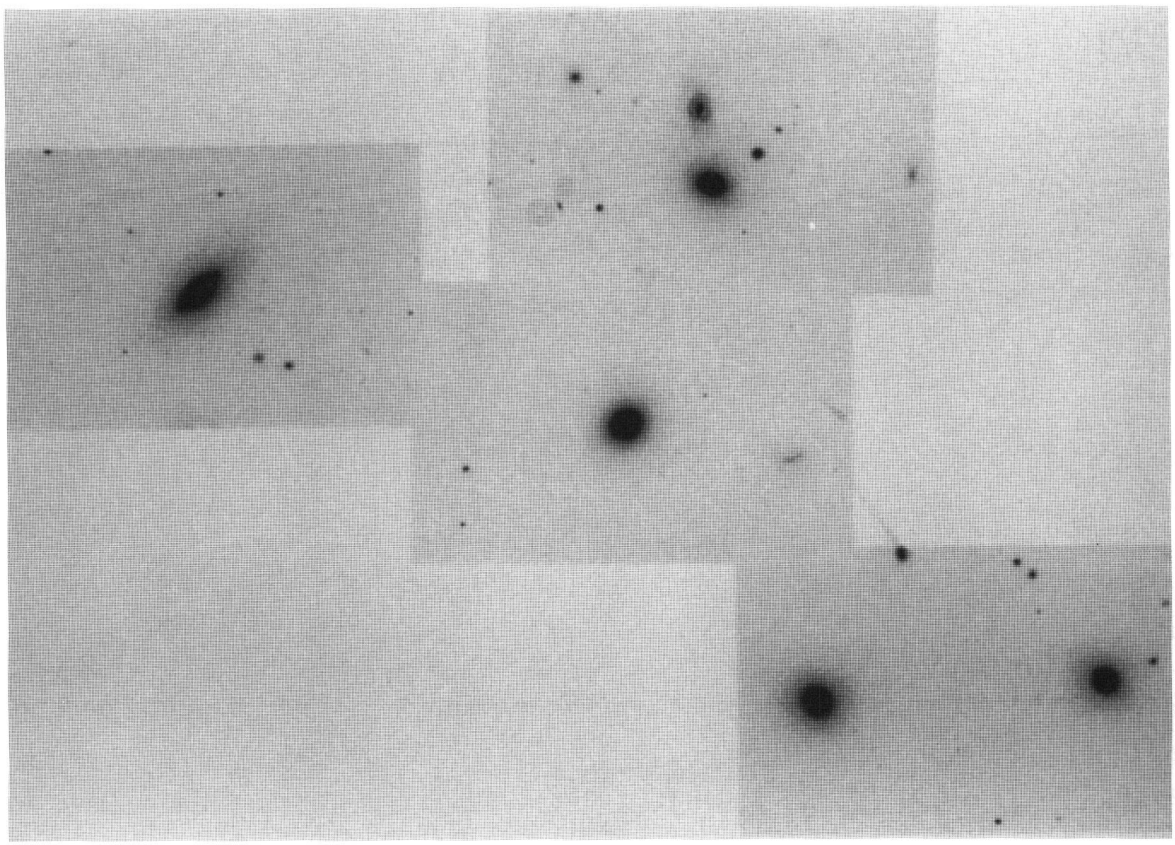
r.a. (1950)	(h m s)	02 05 02.95
dec. (1950)	(° ' ")	+01 54 58.0
galactic longitude	(°)	158.03
galactic latitude	(°)	-55.44
mean redshift		0.0228
total blue magnitude (B_{TC})		12.82
number of galaxies		6
number of accordant galaxies		6
median galaxy separation	(kpc)	77.6
radial velocity dispersion	(km/s)	426.6
crossing time	(Ht_c)	0.0135
mass-to-light ratio	($M_\odot/L_\odot$)	616.6

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	05 18.0	04 59.2	05 04.8	05 02.5	04 50.4	05 02.9
δ	(' ")	55 50.1	52 40.8	54 45.3	56 37.0	52 43.8	57 11.2
v	(km/s)	6967	7117	7222	6244	7197	6242
Δv	(km/s)	30	36	30	36	32	102
T		Sa	E0	E0	E2	Sa	Sbc
a	(")	36.00	25.60	24.50	24.10	22.00	16.80
b	(")	20.70	25.60	24.10	18.90	18.00	10.00
B_{TC}		14.29	14.74	14.37	14.65	15.56	15.74
$B-R$		1.62	1.70	1.52	1.70	1.69	1.30
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)	1.09			3.99		
name		U1624	U1617	U1620	U1618a	U1617	U1618b

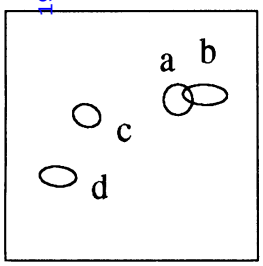


B



R

Group 16



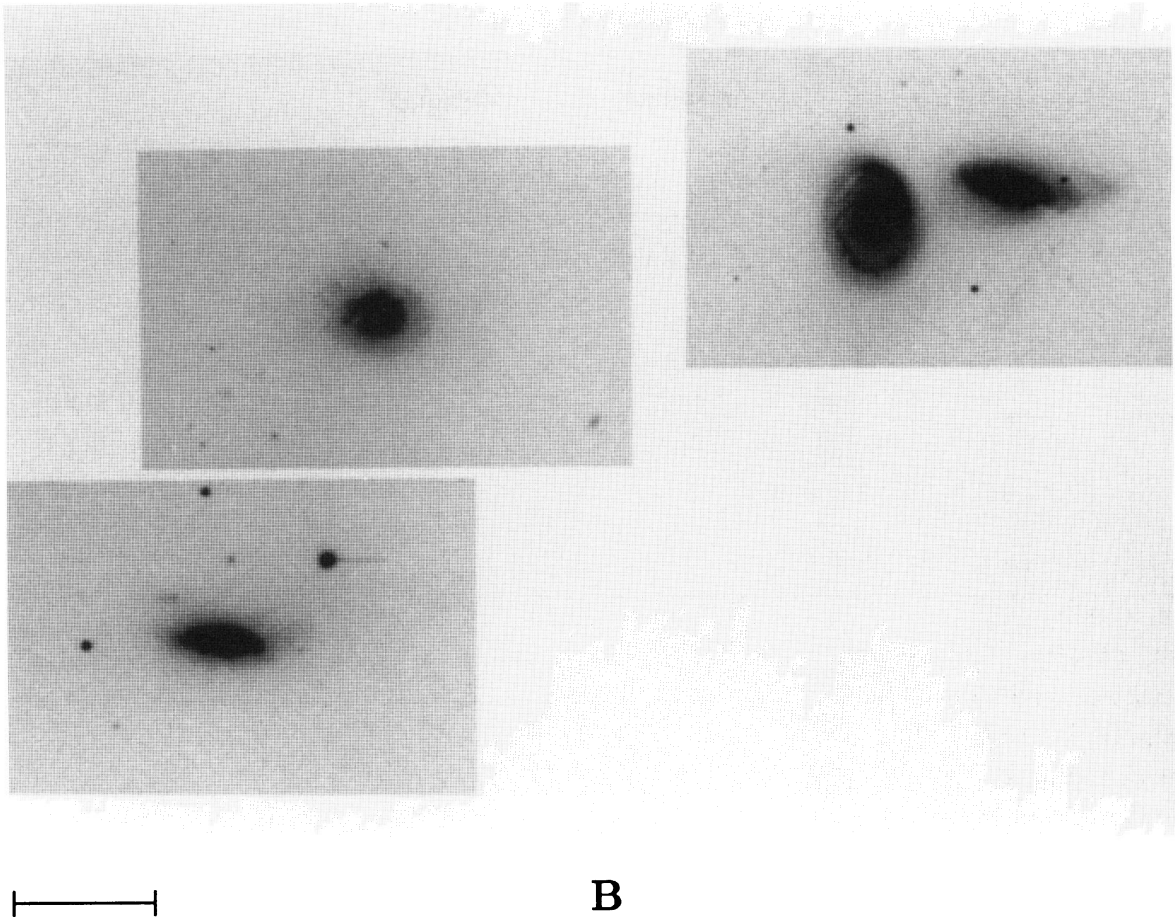
Group 16, also known as Arp 327, consists of four clearly distorted late type galaxies of comparable luminosity. All but galaxy b have strong radio and infrared emission.

GROUP DATA

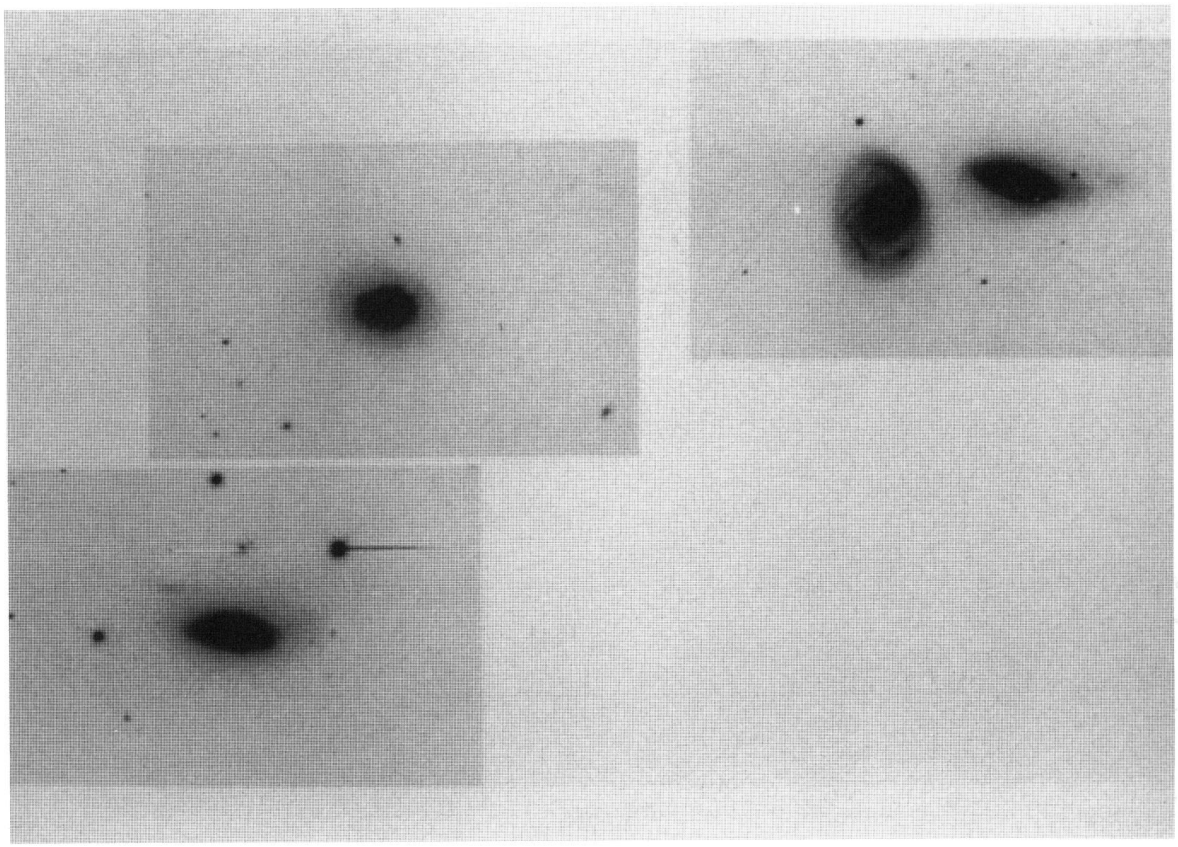
r.a. (1950)	(h m s)	02 07 04.39
dec. (1950)	(° ' ")	-10 23 09.0
galactic longitude	(°)	173.95
galactic latitude	(°)	-64.97
mean redshift		0.0132
total blue magnitude (B_{TC})		11.60
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	44.6
radial velocity dispersion	(km/s)	123.0
crossing time	(Ht_c)	0.0275
mass-to-light ratio	($M_\odot/L_\odot$)	22.4

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	06 57.4	06 53.3	07 11.3	07 15.6
δ	(' ")	22 20.0	22 08.9	22 56.0	25 11.1
v	(km/s)	4152	3977	3851	3847
Δv	(km/s)	39	25	36	44
T		SBab	Sab	Im	Im
a	(")	34.90	49.40	31.50	41.10
b	(")	32.60	23.10	25.10	22.00
B_{TC}		12.76	13.27	13.10	13.42
$B-R$		0.82	1.07	1.04	1.29
$\log F_{60\mu}$	(Jy)	5.39		12.29	12.2
$\log F_{100\mu}$	(Jy)	11.4		19.03	12.15
$\log F_{20cm}$	(mJy)	25.13		80.02	24.18
name		N835	N833	N838	N839

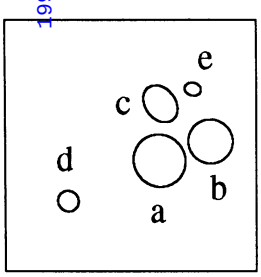


B



R

Group 17



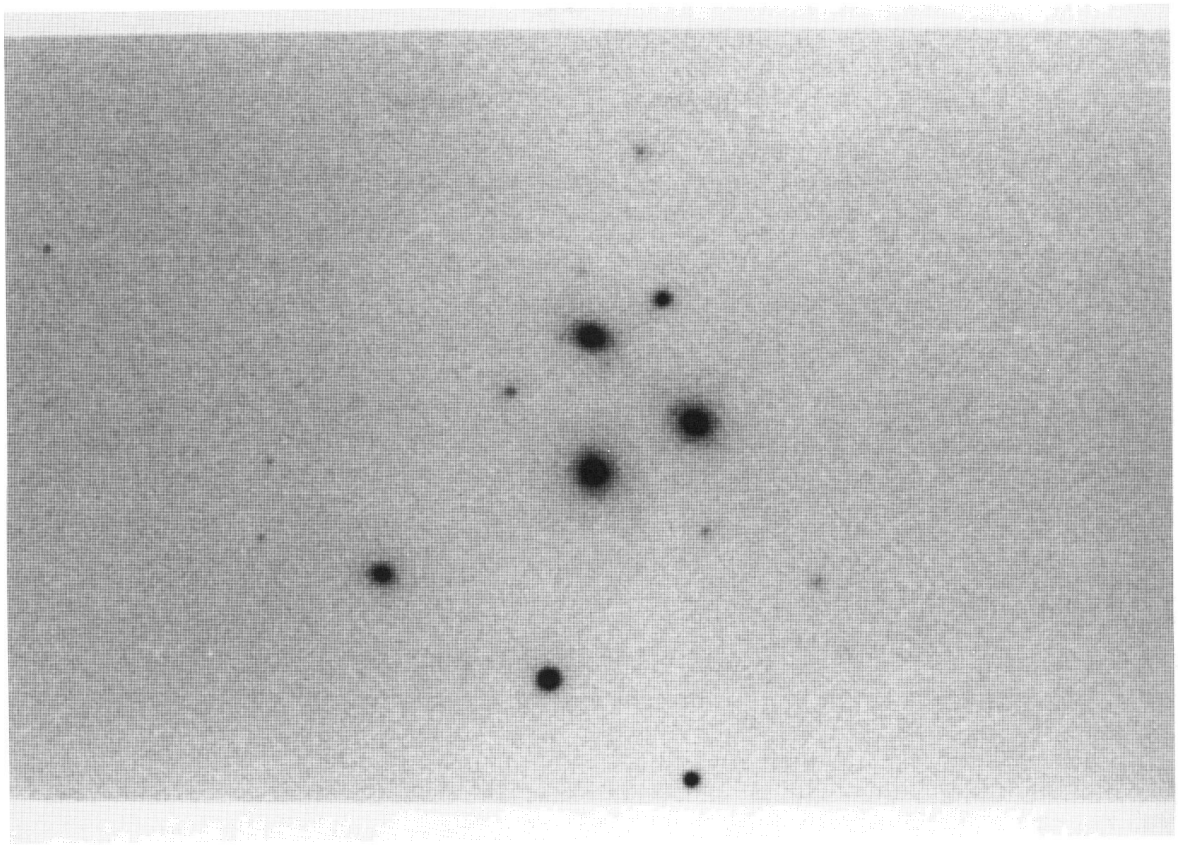
Group 17 is a dense quintet of early type galaxies. Its low velocity dispersion and small size give a very low indicated mass-to-light ratio.

GROUP DATA

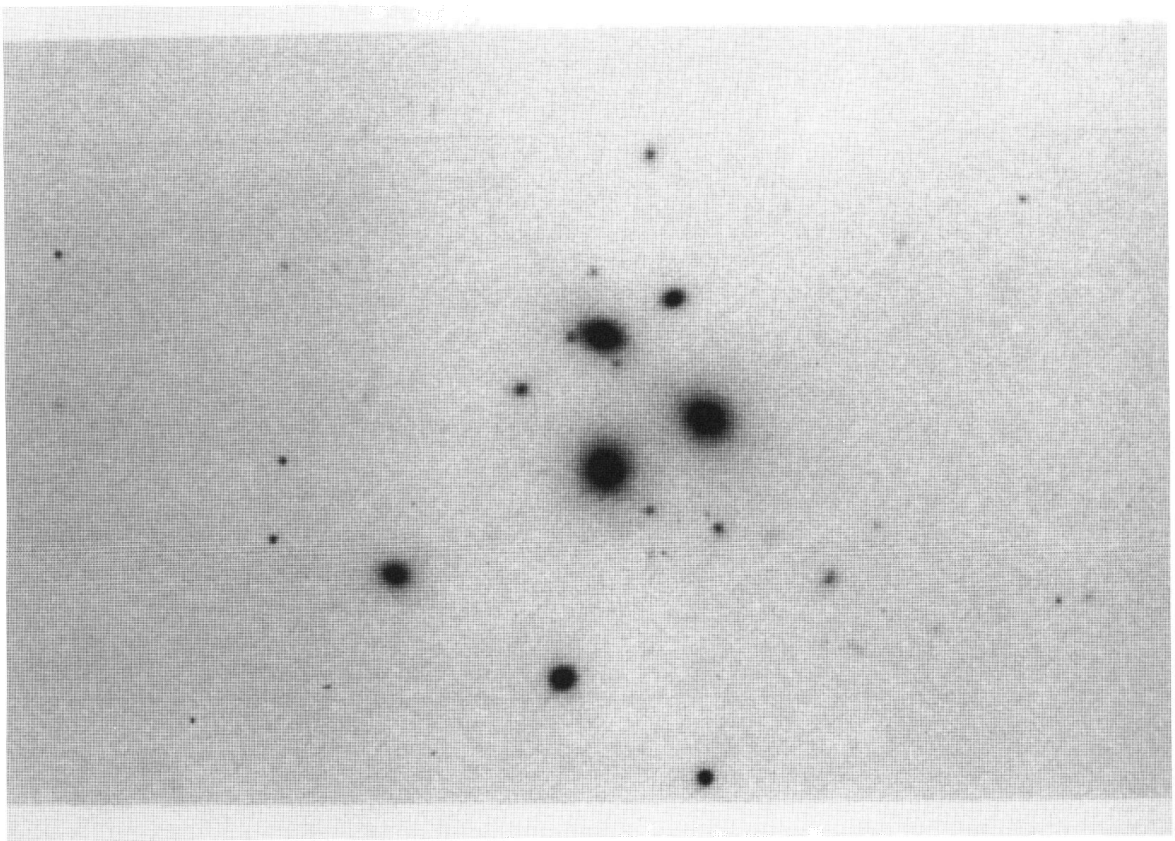
r.a. (1950)	(h m s)	02 11 22.83
dec. (1950)	(° ' ")	+13 04 49.6
galactic longitude	(°)	151.91
galactic latitude	(°)	-44.86
mean redshift		0.0603
total blue magnitude (B_{TC})		15.47
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	22.4
radial velocity dispersion	(km/s)	131.8
crossing time	(Ht_c)	0.0186
mass-to-light ratio	($M_\odot/L_\odot$)	4.5

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	11 22.8	11 21.4	11 22.8	11 25.3	11 21.9
δ	(' ")	04 41.0	04 48.7	05 03.9	04 24.8	05 09.8
v	(km/s)	18288	17904	18224	18124	17976
Δv	(km/s)	44	48	105	107	142
T		E0	E0	S0	S0	S0
a	(")	10.70	9.00	8.10	4.30	3.40
b	(")	10.30	8.90	6.10	4.10	2.60
B_{TC}		16.52	16.59	17.45	18.54	18.98
$B-R$		1.88	1.92	1.91	1.85	1.90
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name						

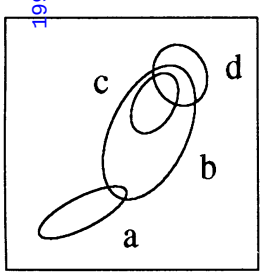


B



R

Group 18



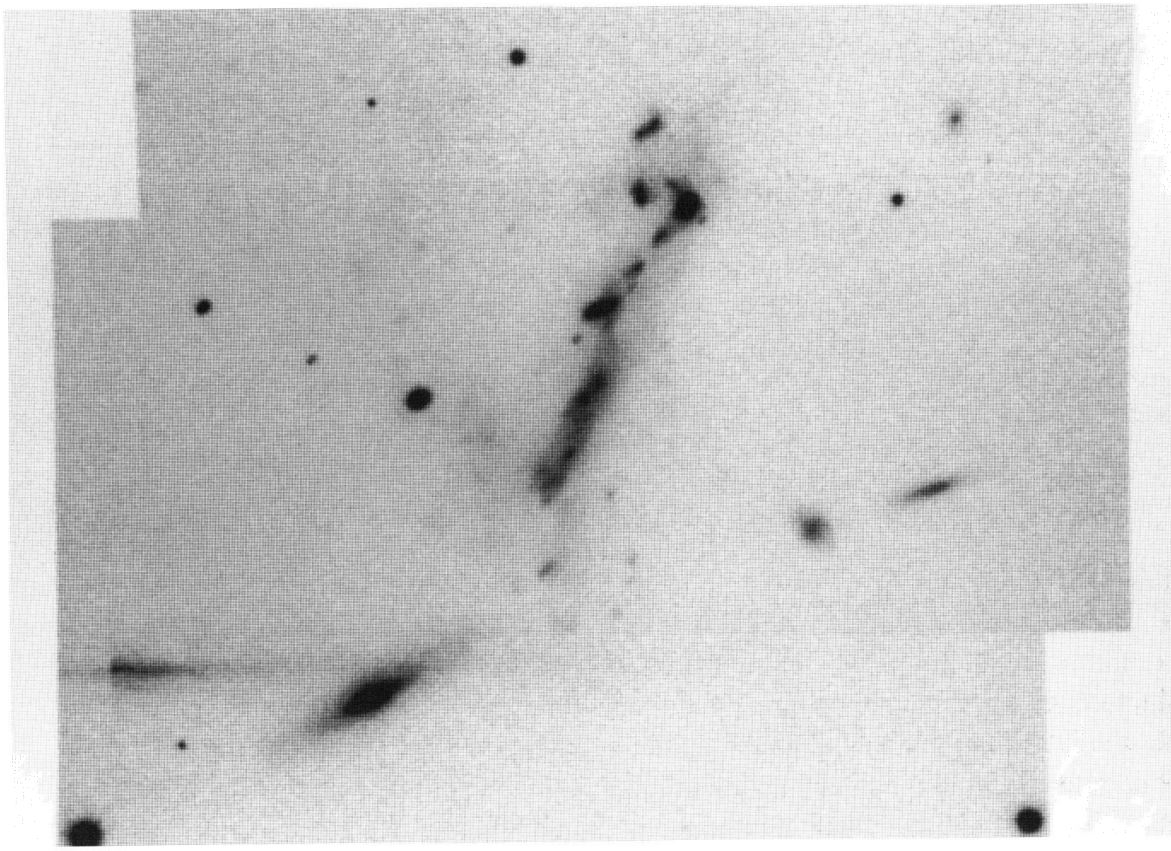
Group 18, also known as Arp 258 and VV143, consists of an apparent background galaxy (a) and a line of three irregular objects in contact. At present no redshift is available for the brightest of these (b).

GROUP DATA

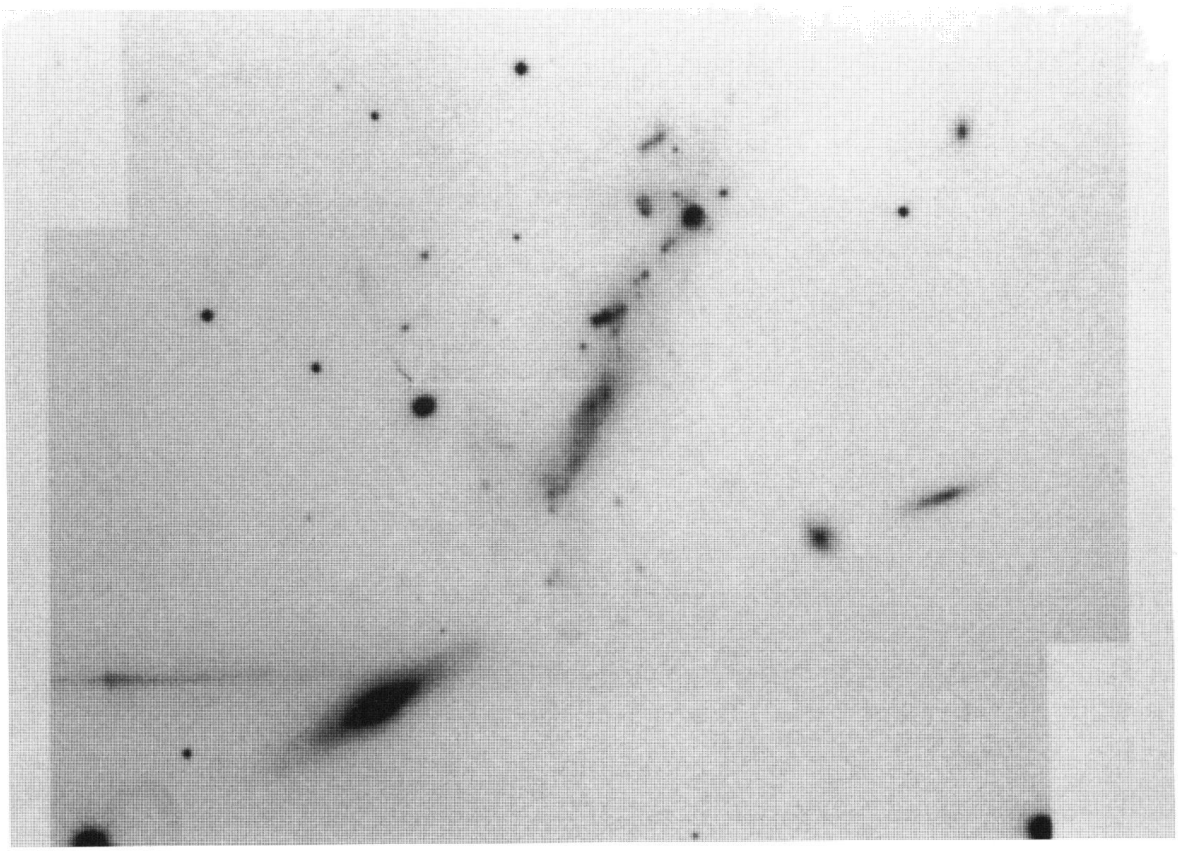
r.a. (1950)	(h m s)	02 36 18.84
dec. (1950)	(° ' ")	+18 10 05.3
galactic longitude	(°)	155.74
galactic latitude	(°)	-37.54
mean redshift		
total blue magnitude (B_{TC})		13.62
number of galaxies		4
number of accordant galaxies		
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	36 21.7	36 18.5	36 18.2	36 17.0
δ	(' ")	09 08.5	10 04.1	10 24.5	10 43.9
v	(km/s)	10019		4143	4067
Δv	(km/s)	47		37	58
T		S0a	Im	Im	Im
a	(")	33.90	50.00	22.80	21.60
b	(")	10.80	26.80	13.70	18.30
B_{TC}		15.01	14.90	15.61	15.10
$B-R$		1.42	0.98	0.82	0.71
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name			U2140a	U2140b	U2140c

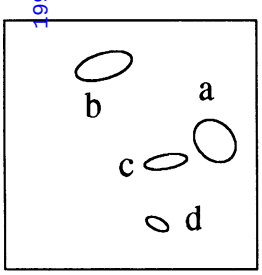


B



R

Group 19



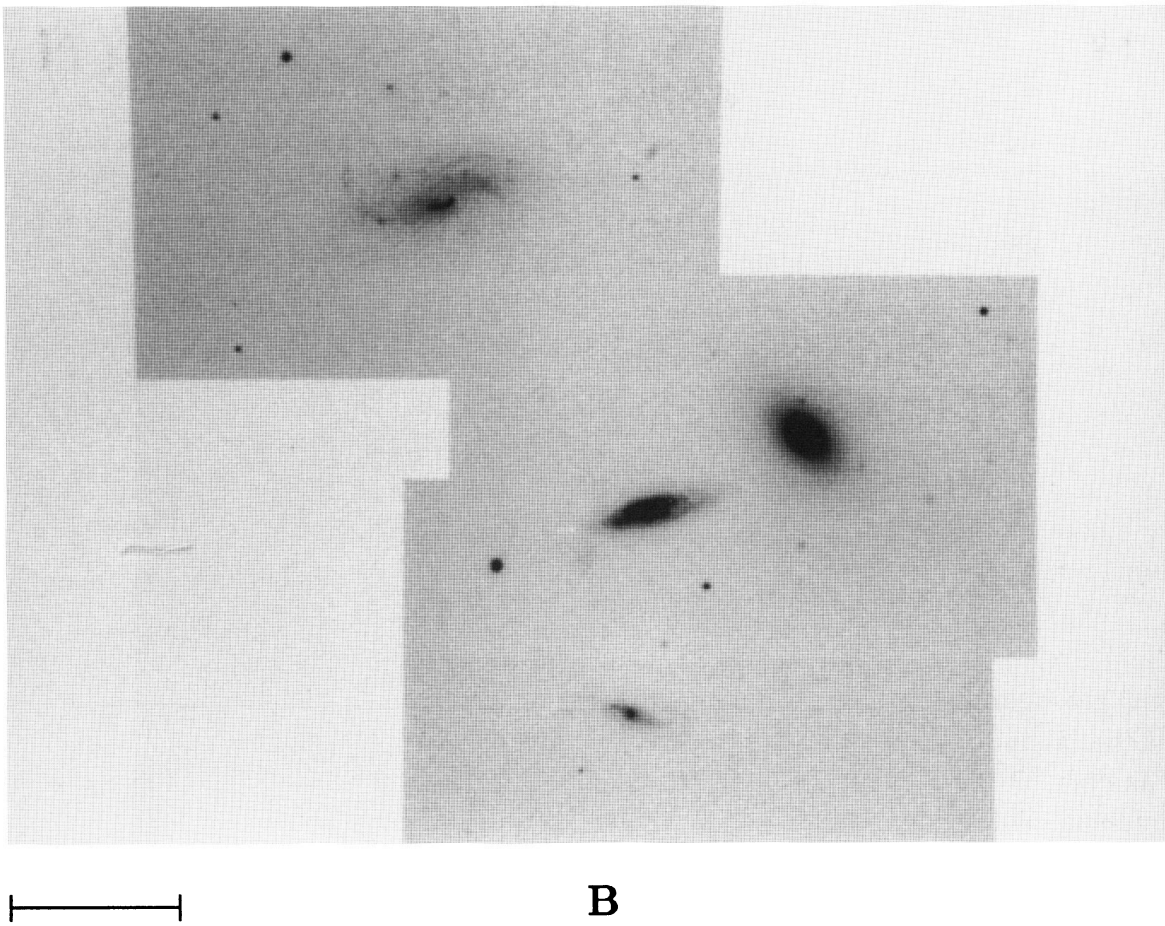
This group consists of an elliptical galaxy plus three distorted spiral galaxies. At present redshifts are available only for the brightest two galaxies. These show the elliptical galaxy to be accordant with at least the brightest spiral galaxy. The brightest spiral galaxy is an infrared source.

GROUP DATA

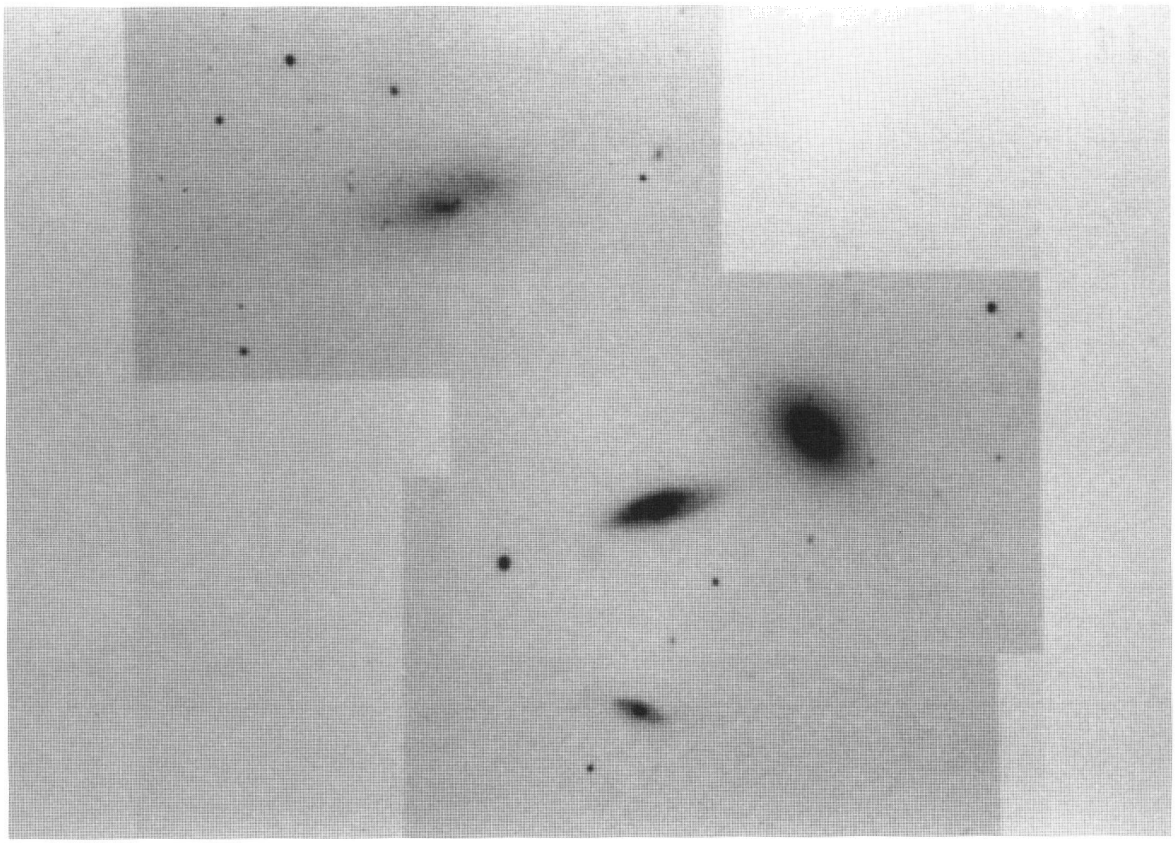
r.a. (1950)	(h m s)	02 40 18.39
dec. (1950)	(° ' ")	-12 38 08.3
galactic longitude	(°)	188.99
galactic latitude	(°)	-60.09
mean redshift		
total blue magnitude (B_{TC})		13.21
number of galaxies		4
number of accordant galaxies		
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	40 14.3	40 18.0	40 22.7	40 18.7
δ	(' ")	38 00.4	38 23.6	36 35.6	39 33.5
v	(km/s)	4279	4210		
Δv	(km/s)	25	25		
T		E2	Scd	Sdm	SBb
a	(")	26.20	24.10	32.40	13.40
b	(")	20.40	7.80	14.50	6.50
B_{TC}		14.00	15.42	14.46	16.65
$B-R$		1.56	1.28	1.12	1.60
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)		1.16		
$\log F_{20cm}$	(mJy)				
name					

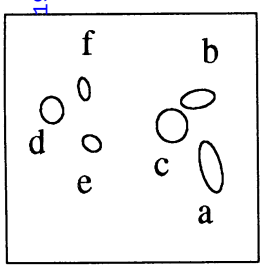


B



R

Group 20



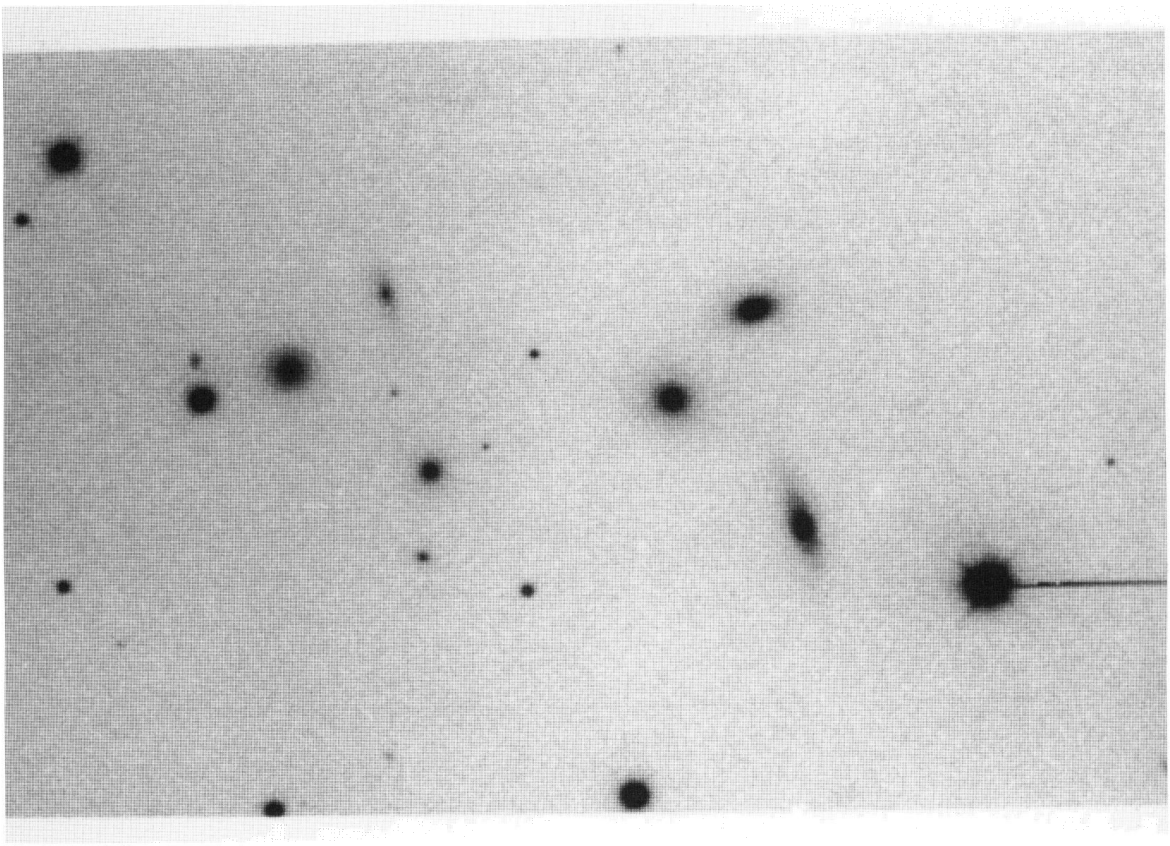
Group 20 is a small group of six compact early-type galaxies. It has a higher than average velocity dispersion and a relatively short crossing time.

GROUP DATA

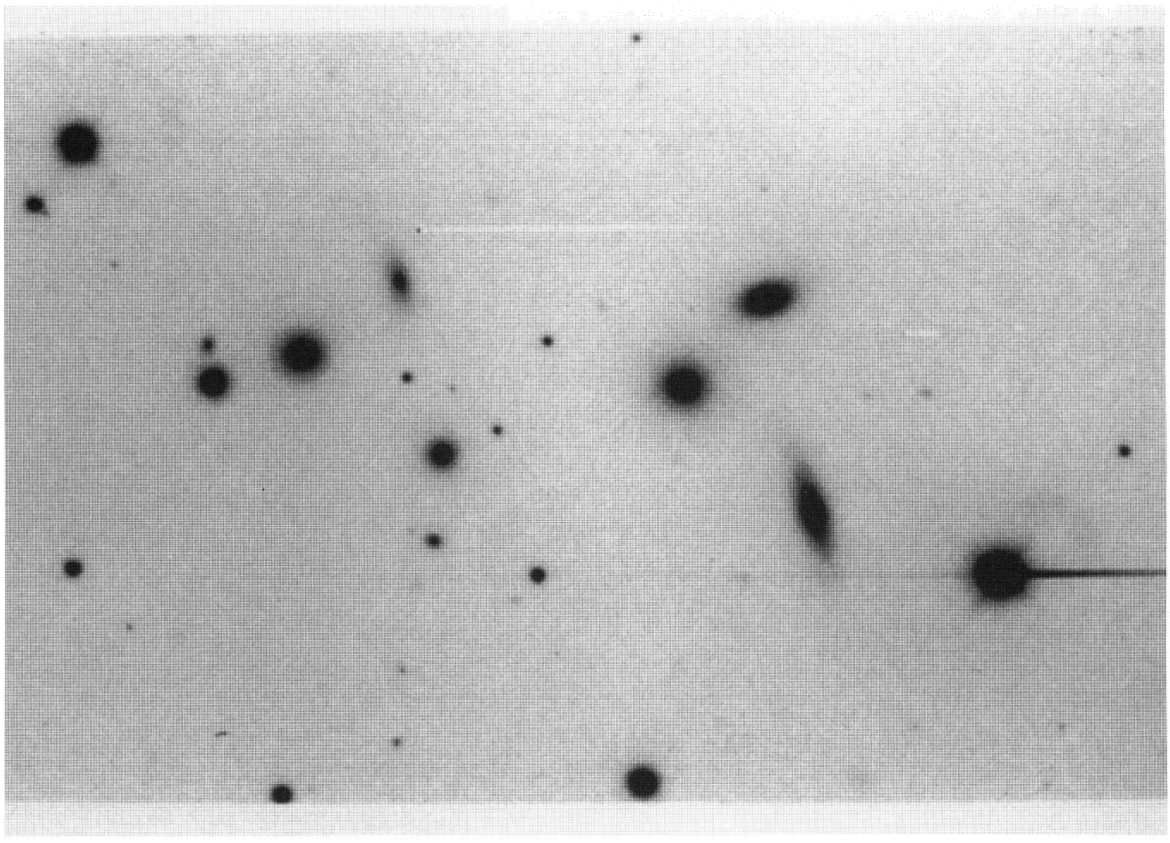
r.a. (1950)	(h m s)	02 41 20.15
dec. (1950)	(° ' ")	+25 53 42.0
galactic longitude	(°)	152.35
galactic latitude	(°)	-30.24
mean redshift		0.0484
total blue magnitude (B_{TC})		15.14
number of galaxies		6
number of accordant galaxies		5
median galaxy separation	(kpc)	31.4
radial velocity dispersion	(km/s)	275.4
crossing time	(Ht_c)	0.0085
mass-to-light ratio	($M_\odot/L_\odot$)	77.6

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	41 17.1	41 17.6	41 18.6	41 23.5	41 21.9	41 22.2
δ	(' ")	53 17.1	53 54.7	53 40.0	53 49.0	53 34.0	54 00.6
v	(km/s)	14477	14424	15032	10561	14312	14280
Δv	(km/s)	45	42	45	61	49	62
T		S0	E5	E1	S0a	E2	S0a
a	(")	14.50	9.40	9.20	7.40	5.40	6.30
b	(")	5.50	5.00	8.50	6.20	4.10	3.00
B_{TC}		16.70	16.73	16.64	17.37	17.69	18.25
$B-R$		1.85	1.87	1.83	1.75	1.84	1.75
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)						
name							

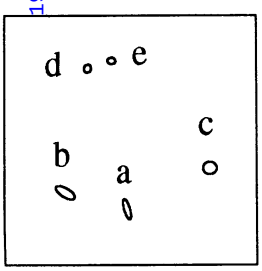


B



R

Group 21



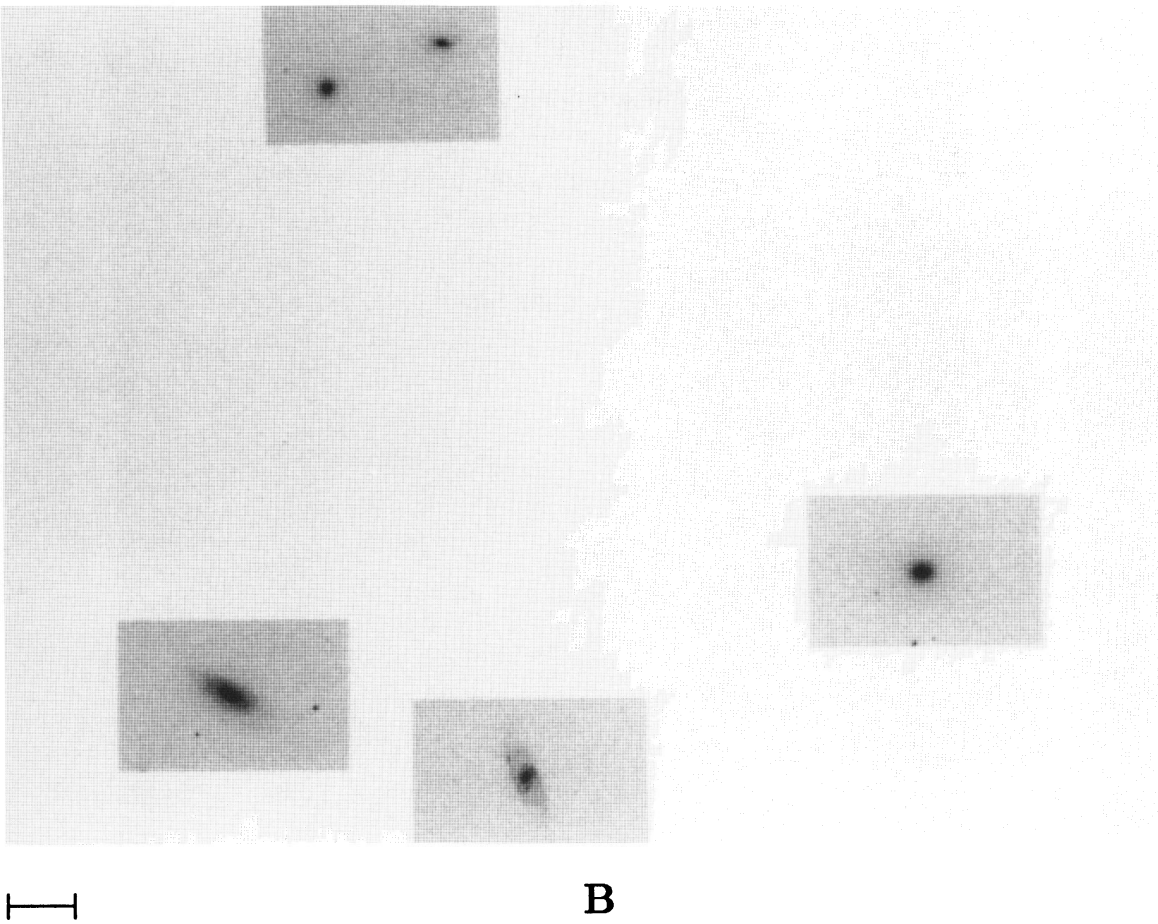
This group consists of a loose galaxy triplet and a fainter pair of galaxies at a higher redshift. The bright Sc galaxy (a) is a radio source.

GROUP DATA

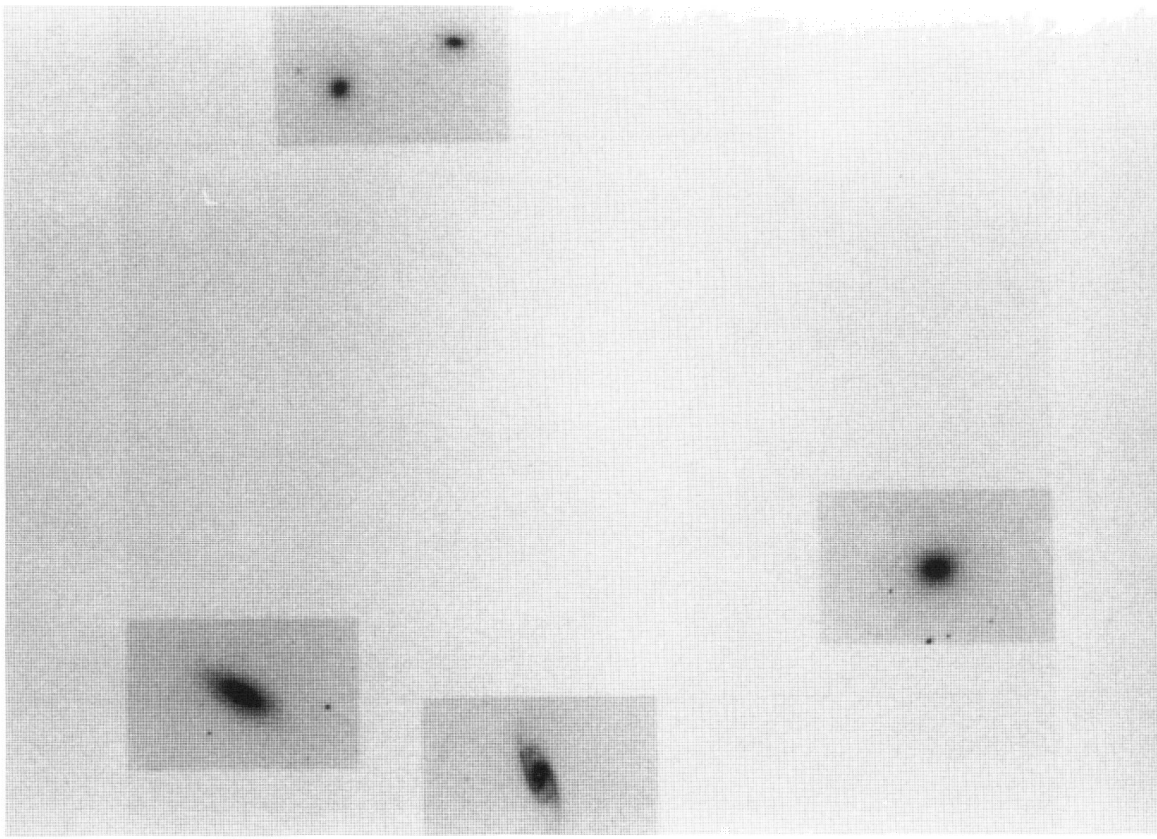
r.a. (1950)	(h m s)	02 43 00.37
dec. (1950)	(° ' ")	-17 50 12.7
galactic longitude	(°)	199.03
galactic latitude	(°)	-62.09
mean redshift		0.0251
total blue magnitude (B_{TC})		12.65
number of galaxies		5
number of accordant galaxies		3
median galaxy separation	(kpc)	134.9
radial velocity dispersion	(km/s)	112.2
crossing time	(Ht_c)	0.0933
mass-to-light ratio	($M_\odot/L_\odot$)	63.1

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	42 58.4	43 16.6	42 34.0	43 09.9	43 02.9
δ	(' ")	55 07.5	53 56.5	52 12.8	45 09.5	44 37.0
v	(km/s)	7614	7568	7356	8835	8843
Δv	(km/s)	29	35	31	48	61
T		Sc	Sab	E1	E2	SB0a
a	(")	44.80	45.90	29.20	18.00	17.40
b	(")	13.20	19.10	26.80	15.00	14.70
B_{TC}		14.13	13.85	14.10	15.18	15.81
$B-R$		1.87	1.89	1.62	1.62	1.62
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)	2.99				
name						

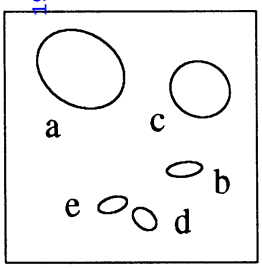


B



R

Group 22



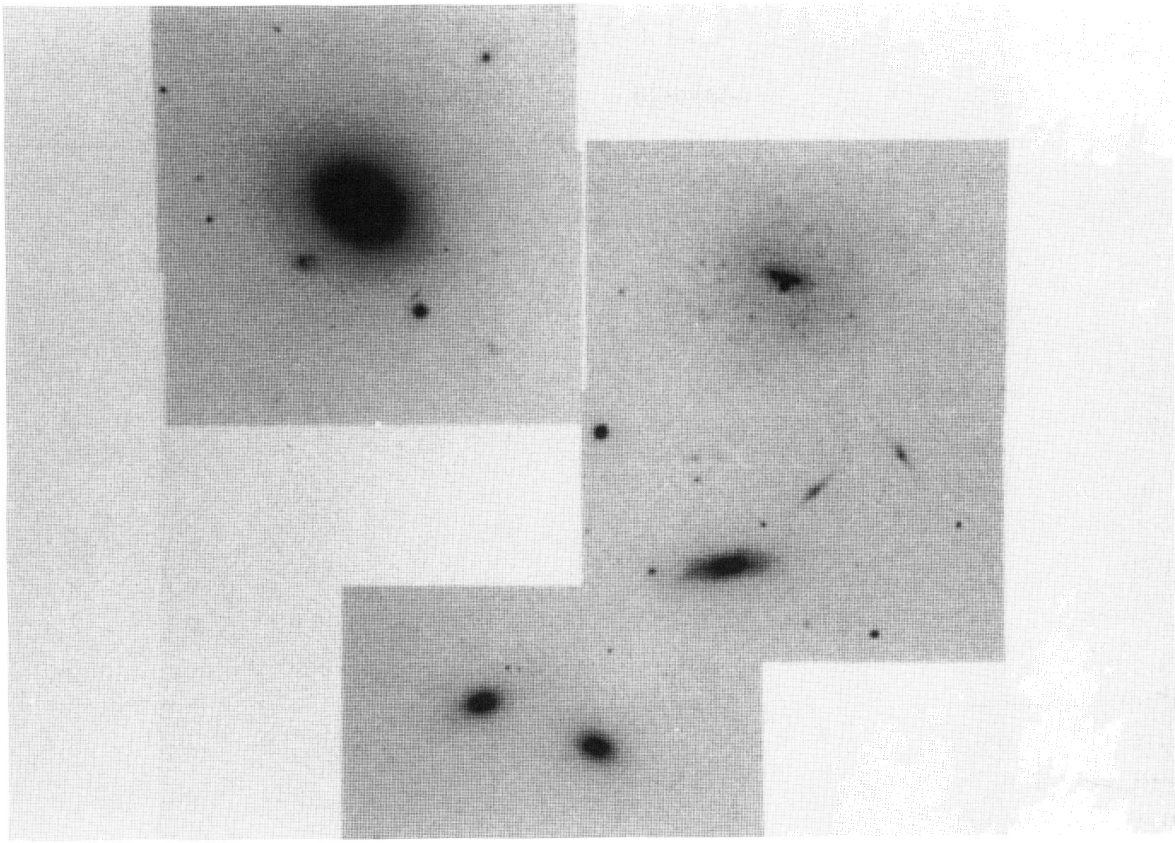
Group 22 consists of a nearby triplet containing a large elliptical galaxy (NGC 1199) and two spiral galaxies. The other two fainter members form a pair at a much higher redshift. The triplet has a very low velocity dispersion which results in a low indicated mass-to-light ratio.

GROUP DATA

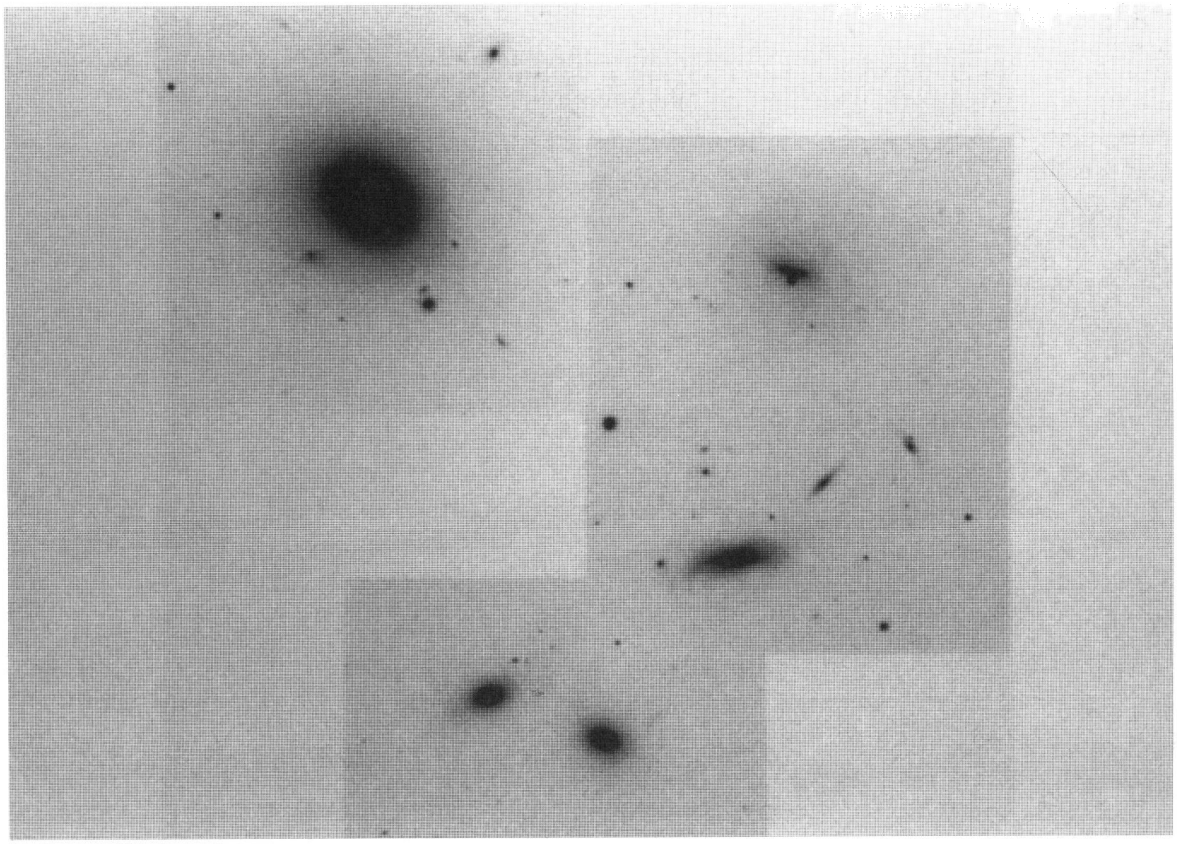
r.a. (1950)	(h m s)	03 01 10.69
dec. (1950)	(° ' ")	-15 50 51.2
galactic longitude	(°)	199.22
galactic latitude	(°)	-57.31
mean redshift		0.0090
total blue magnitude (B_{TC})		11.80
number of galaxies		5
number of accordant galaxies		3
median galaxy separation	(kpc)	26.7
radial velocity dispersion	(km/s)	43.7
crossing time	(Ht_c)	0.1905
mass-to-light ratio	($M_\odot/L_\odot$)	1.3

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	01 18.2	01 06.0	01 04.0	01 10.7	01 14.5
δ	(' ")	48 30.4	51 24.5	49 05.8	52 49.8	52 25.3
v	(km/s)	2705	2625	2728	9342	9506
Δv	(km/s)	22	38	60	45	49
T		E2	Sa	SBcd	E3	E5
a	(")	79.80	30.60	52.30	23.30	25.80
b	(")	62.50	12.40	47.30	15.70	13.00
B_{TC}		12.24	14.47	13.90	14.97	15.12
$B-R$		1.62	1.52	1.20	1.71	1.65
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name		N1199				

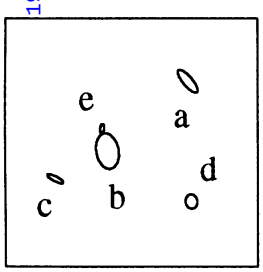


B



R

Group 23



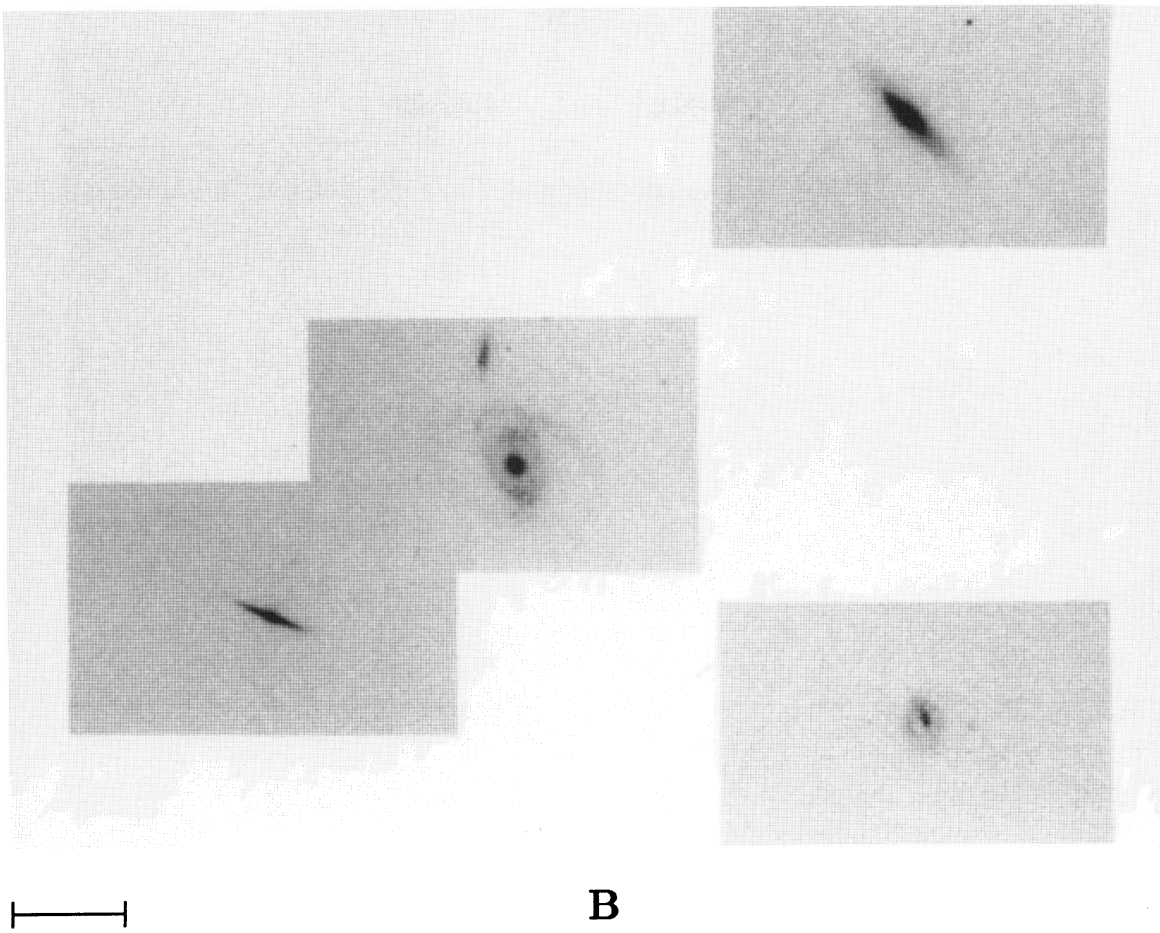
This interesting group contains an accordant quartet and a small high-redshift galaxy in close proximity to galaxy b. Both galaxies b and d are infrared sources and galaxy b is a radio source.

GROUP DATA

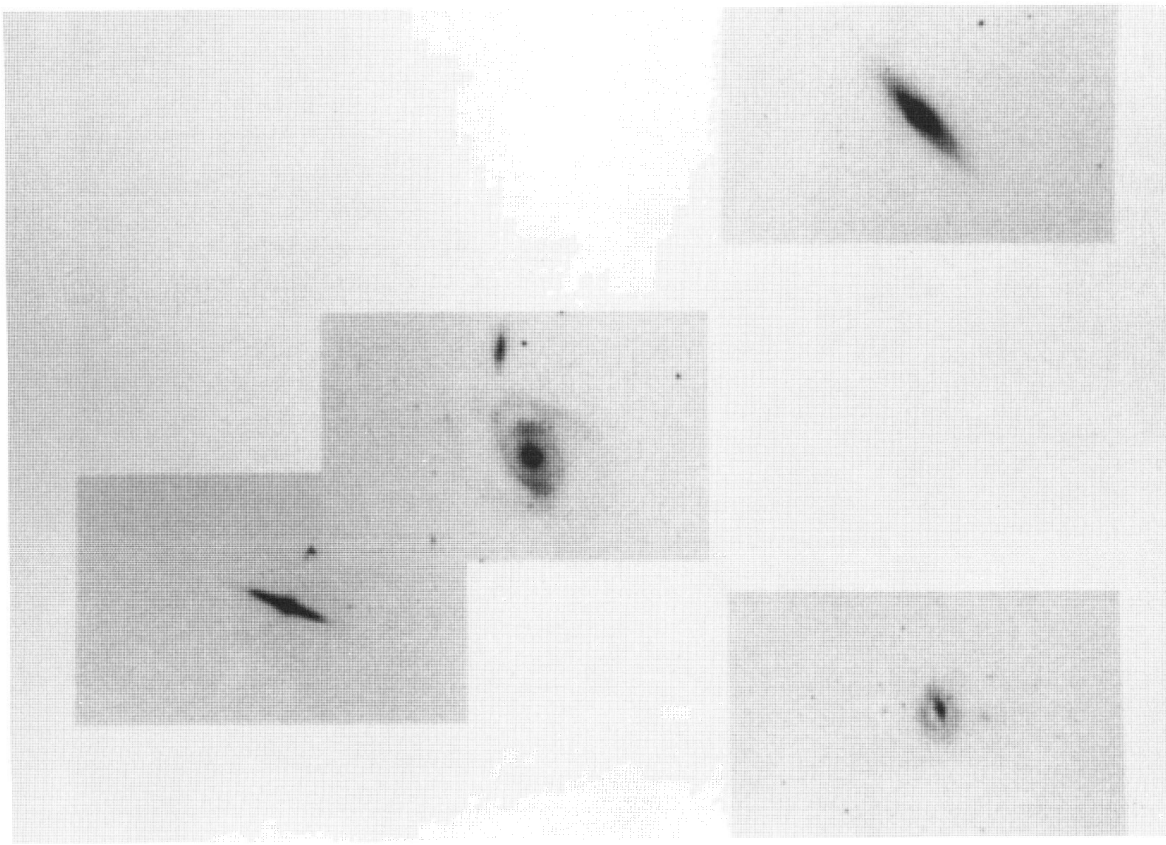
r.a. (1950)	(h m s)	03 04 40.43
dec. (1950)	(° ' ")	-09 46 59.9
galactic longitude	(°)	190.70
galactic latitude	(°)	-53.54
mean redshift		0.0161
total blue magnitude (B_{TC})		13.31
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	66.1
radial velocity dispersion	(km/s)	169.8
crossing time	(Ht_c)	0.0302
mass-to-light ratio	($M_\odot/L_\odot$)	257.0

GALAXY DATA

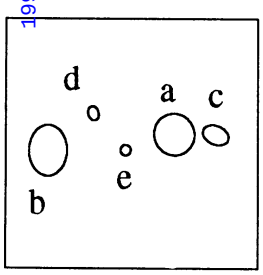
Galaxy:		a	b	c	d	e
α	(m s)	04 30.4	04 44.1	04 53.0	04 29.8	04 44.9
δ	(' ")	44 09.5	47 06.1	48 17.5	49 17.2	46 09.0
v	(km/s)	4798	4921	5016	4562	10150
Δv	(km/s)	37	30	97	54	60
T		Sab	SBc	S0	Sd	Sm
a	(")	37.20	46.10	23.20	19.30	12.10
b	(")	11.90	28.70	6.80	15.20	5.50
B_{TC}		14.32	14.42	15.52	16.00	17.03
$B-R$		1.59	1.59	2.25	1.28	1.52
$\log F_{60\mu}$	(Jy)		1.38		0.56	
$\log F_{100\mu}$	(Jy)		3.78			
$\log F_{20cm}$	(mJy)		6.77			
name		N1214	N1215	N1216		



B



Group 24



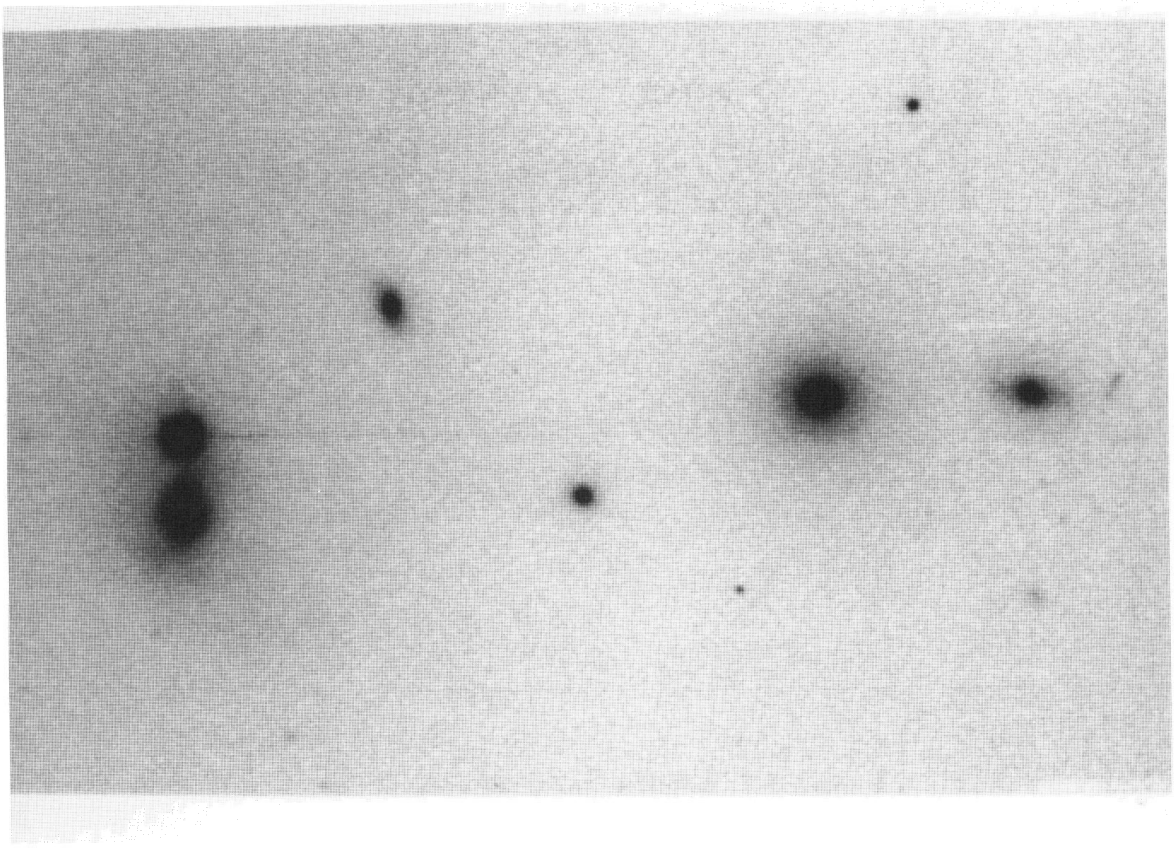
Group 24 is a small quintet of mostly early-type galaxies. Its dynamical properties are typical of compact groups. The two brightest galaxies have diffuse envelopes. A star is superimposed on the image of galaxy b.

GROUP DATA

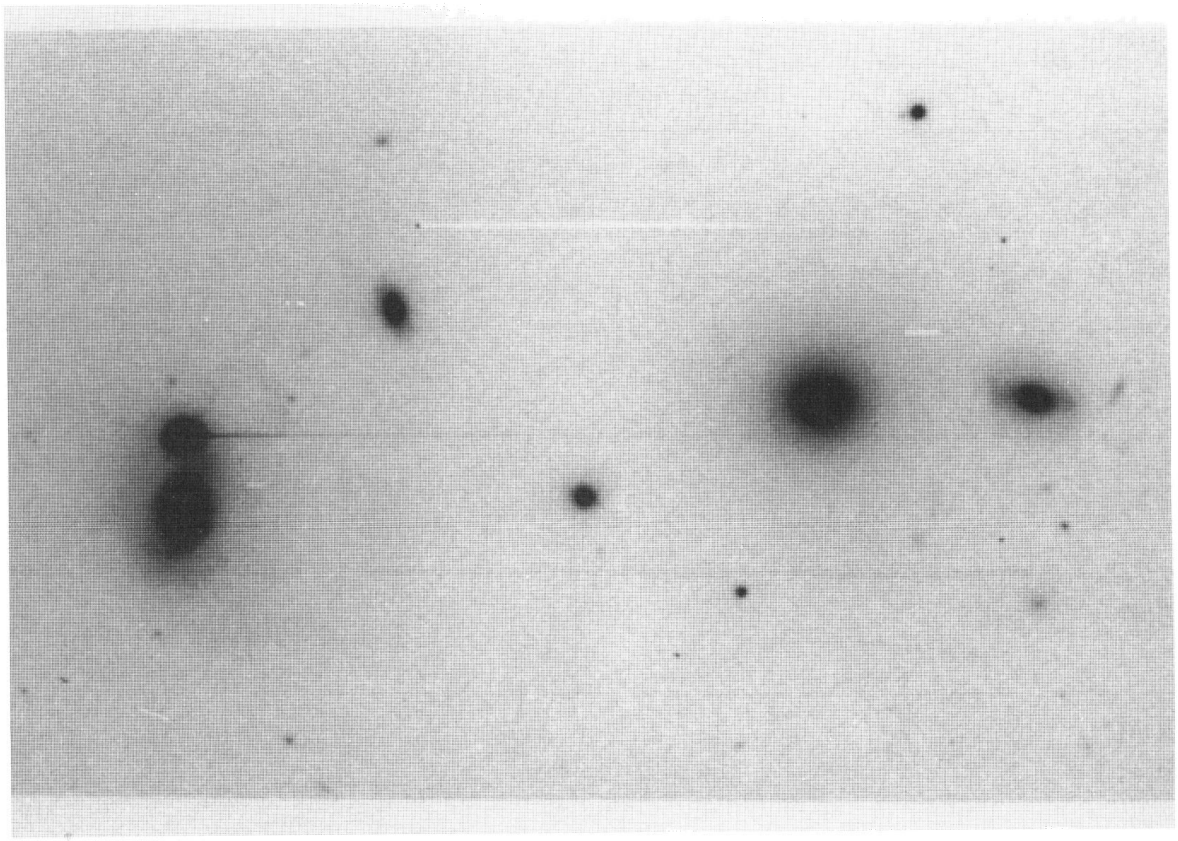
r.a. (1950)	(h m s)	03 17 53.97
dec. (1950)	(° ' ")	-11 02 37.1
galactic longitude	(°)	195.29
galactic latitude	(°)	-51.44
mean redshift		0.0305
total blue magnitude (B_{TC})		14.08
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	29.5
radial velocity dispersion	(km/s)	199.5
crossing time	(Ht_c)	0.0117
mass-to-light ratio	($M_\odot/L_\odot$)	39.8

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	17 51.4	17 58.9	17 49.0	17 56.2	17 54.3
δ	(' ")	02 35.0	02 49.5	02 35.4	02 16.4	02 49.1
v	(km/s)	9248	9137	9283	8779	9323
Δv	(km/s)	41	44	109	61	61
T		S0	SBa	SB0	S0a	E0
a	(")	18.70	22.60	12.00	6.50	4.70
b	(")	17.70	16.70	8.30	4.70	4.60
B_{TC}		15.23	14.89	16.60	17.46	17.64
$B-R$		1.69	1.54	1.61	1.61	1.63
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name						

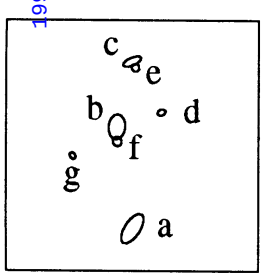


B



R

Group 25



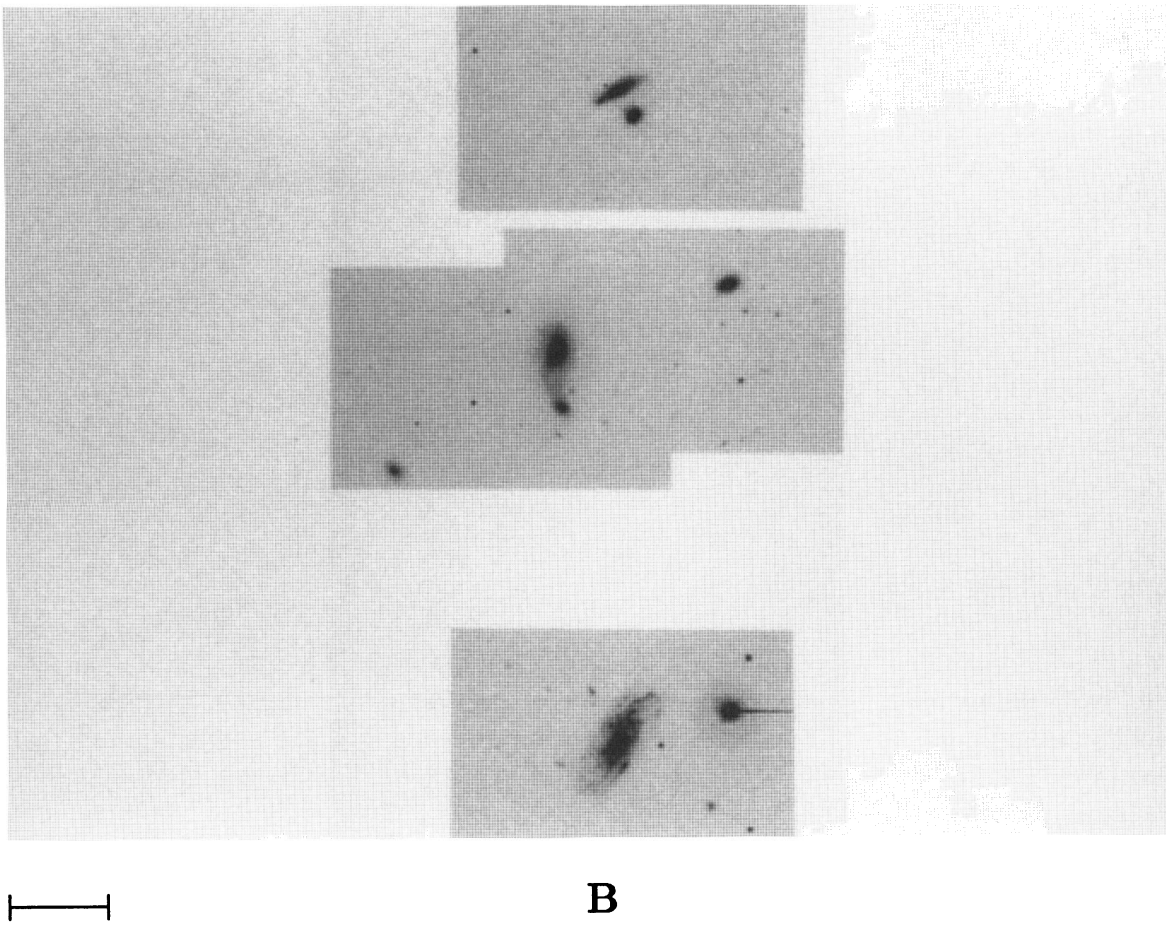
Group 25 consists of an accordant quartet plus three galaxies at higher redshifts. The quartet is relatively loose and has a low velocity dispersion. The brightest low redshift and high redshift galaxies (a and c) are infrared sources. Galaxy a is also a radio source.

GROUP DATA

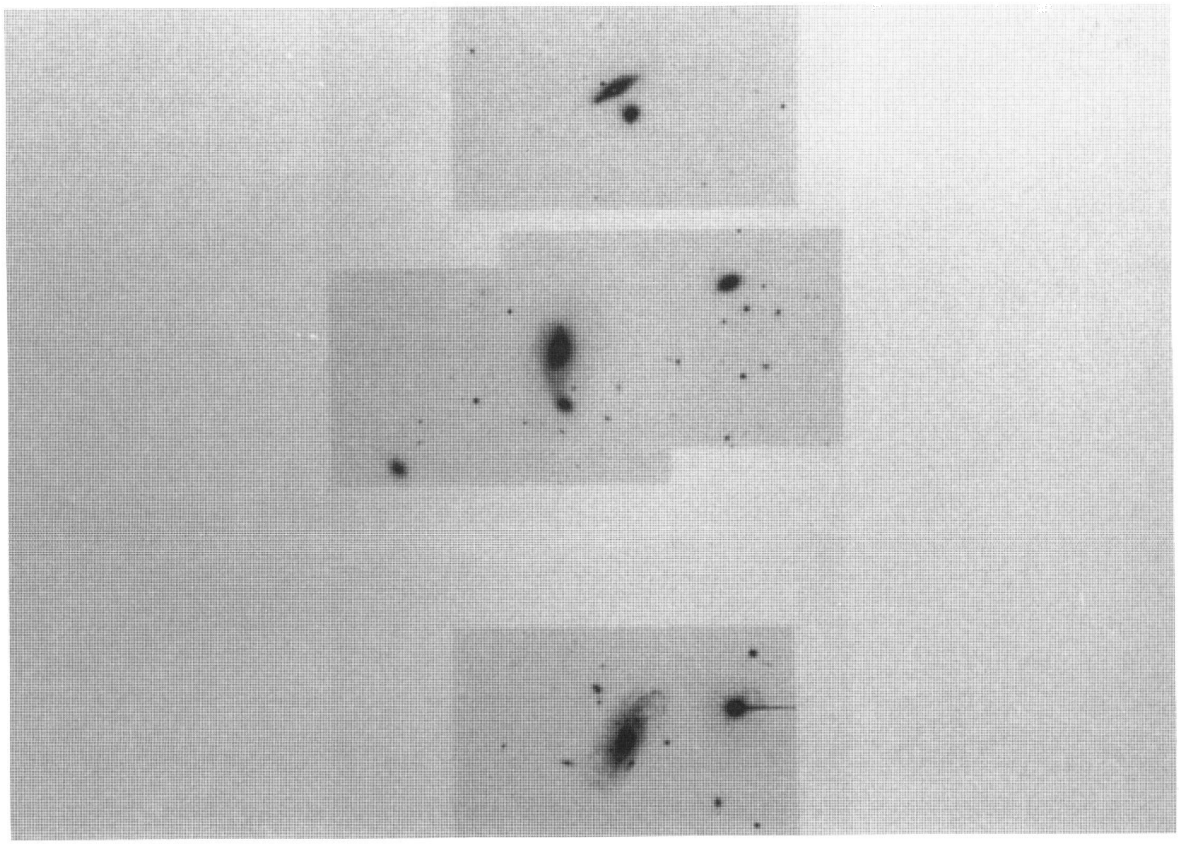
r.a. (1950)	(h m s)	03 18 11.77
dec. (1950)	(° ' ")	-01 13 28.8
galactic longitude	(°)	183.20
galactic latitude	(°)	-45.72
mean redshift		0.0212
total blue magnitude (B_{TC})		12.98
number of galaxies		7
number of accordant galaxies		4
median galaxy separation	(kpc)	47.9
radial velocity dispersion	(km/s)	61.7
crossing time	(Ht_c)	0.0692
mass-to-light ratio	($M_\odot/L_\odot$)	9.3

GALAXY DATA

Galaxy:		a	b	c	d	e	f	g
α	(m s)	18 10.5	18 12.9	18 10.6	18 06.1	18 10.0	18 12.8	18 19.6
δ	(' ")	17 19.8	13 27.5	10 55.3	12 53.8	11 09.7	14 01.3	14 34.1
v	(km/s)	6285	6408	10864	6401	10965	6279	12179
Δv	(km/s)	30	35	61	36	38	37	26
T		SBc	SBa	Sb	S0	Sdm	S0	S0
a	(")	38.40	29.00	22.30	9.80	9.30	11.10	8.70
b	(")	17.50	19.10	8.80	7.00	8.70	9.90	6.20
B_{TC}		13.86	14.45	15.35	15.92	15.89	16.98	16.93
$B-R$		1.05	1.75	1.46	1.46	1.46	1.52	1.70
$\log F_{60\mu}$	(Jy)	0.65		0.67				
$\log F_{100\mu}$	(Jy)			1.49				
$\log F_{20cm}$	(mJy)	2.23						
name		U2690	U2691a				U2691b	

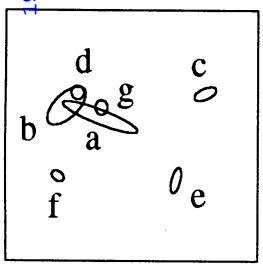


B



R

Group 26



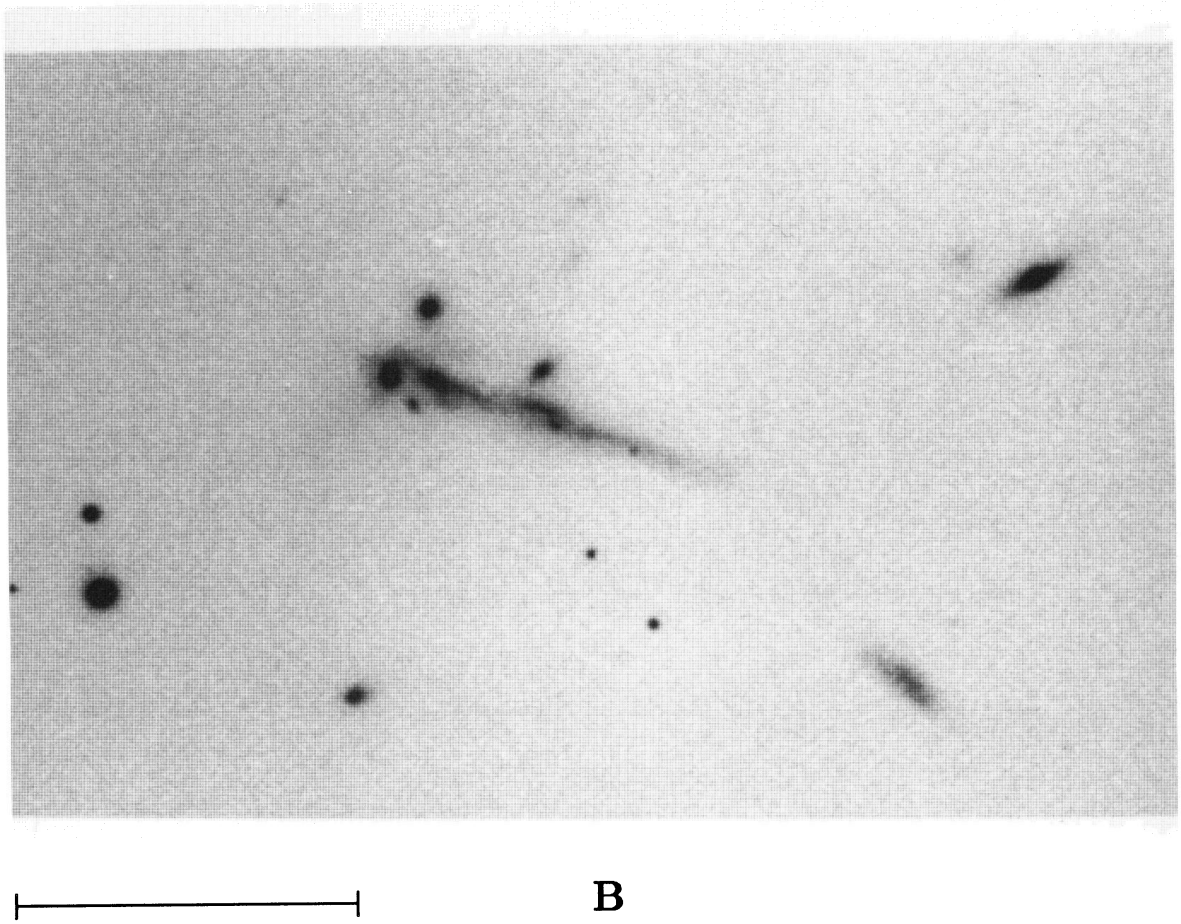
This is a dense and populous group with seven galaxies, all with accordant redshifts. Its dynamical properties are close to the median of the sample. The large spiral galaxy seen edge appears to be in contact with three other galaxies and is an infrared and radio source.

GROUP DATA

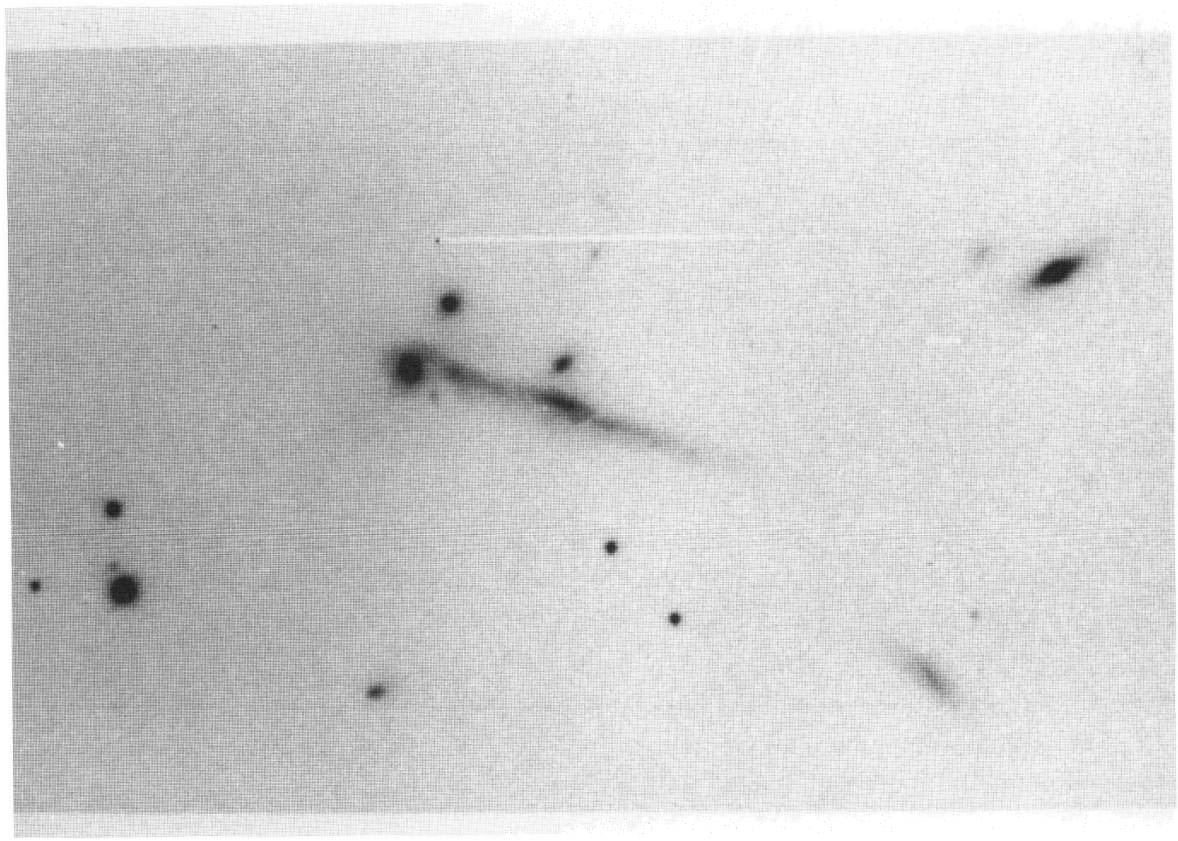
r.a. (1950)	(h m s)	03 19 33.44
dec. (1950)	(° ' ")	-13 49 50.9
galactic longitude	(°)	199.57
galactic latitude	(°)	-52.44
mean redshift		0.0316
total blue magnitude (B_{TC})		14.33
number of galaxies		7
number of accordant galaxies		7
median galaxy separation	(kpc)	31.6
radial velocity dispersion	(km/s)	199.5
crossing time	(Ht_c)	0.0120
mass-to-light ratio	($M_\odot/L_\odot$)	70.8

GALAXY DATA

Galaxy:		a	b	c	d	e	f	g
α	(m s)	19 34.1	19 36.0	19 28.4	19 35.3	19 29.9	19 36.4	19 34.0
δ	(' ")	49 44.9	49 36.0	49 26.1	49 25.3	50 35.1	50 31.8	49 37.3
v	(km/s)	9678	9332	9618	9133	9623	9626	9293
Δv	(km/s)	50	39	62	62	50	46	62
T		Scd	E0	S0	cI	Im	cI	S0
a	(")	32.00	19.50	9.60	5.60	10.50	5.40	5.90
b	(")	5.80	9.60	4.40	5.00	3.50	3.70	5.00
B_{TC}		16.10	15.61	17.10	15.81	17.05	18.68	17.40
$B-R$		0.75	1.30	1.10	0.54	0.66	0.36	1.03
$\log F_{60\mu}$	(Jy)	0.57						
$\log F_{100\mu}$	(Jy)	1.43						
$\log F_{20cm}$	(mJy)	3.92						
name								

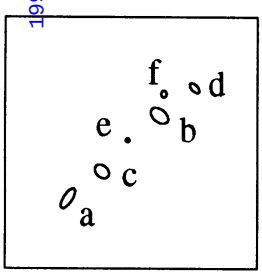


B



R

Group 27



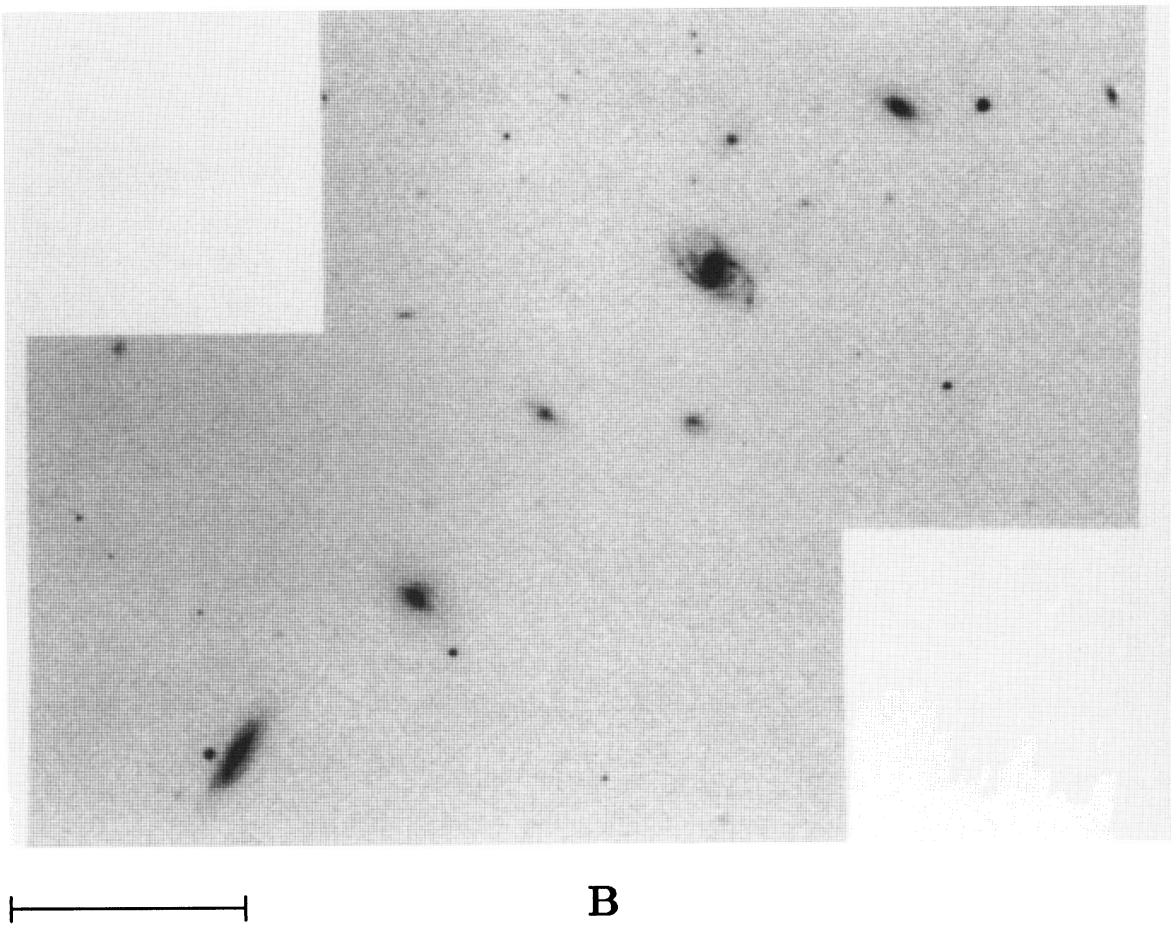
Group 27 consists of four accordant high-redshift galaxies and a lower-redshift pair. The quartet has a relatively large intergalaxy separation and a long crossing time. The faintest galaxy (f) is a relatively strong radio source.

GROUP DATA

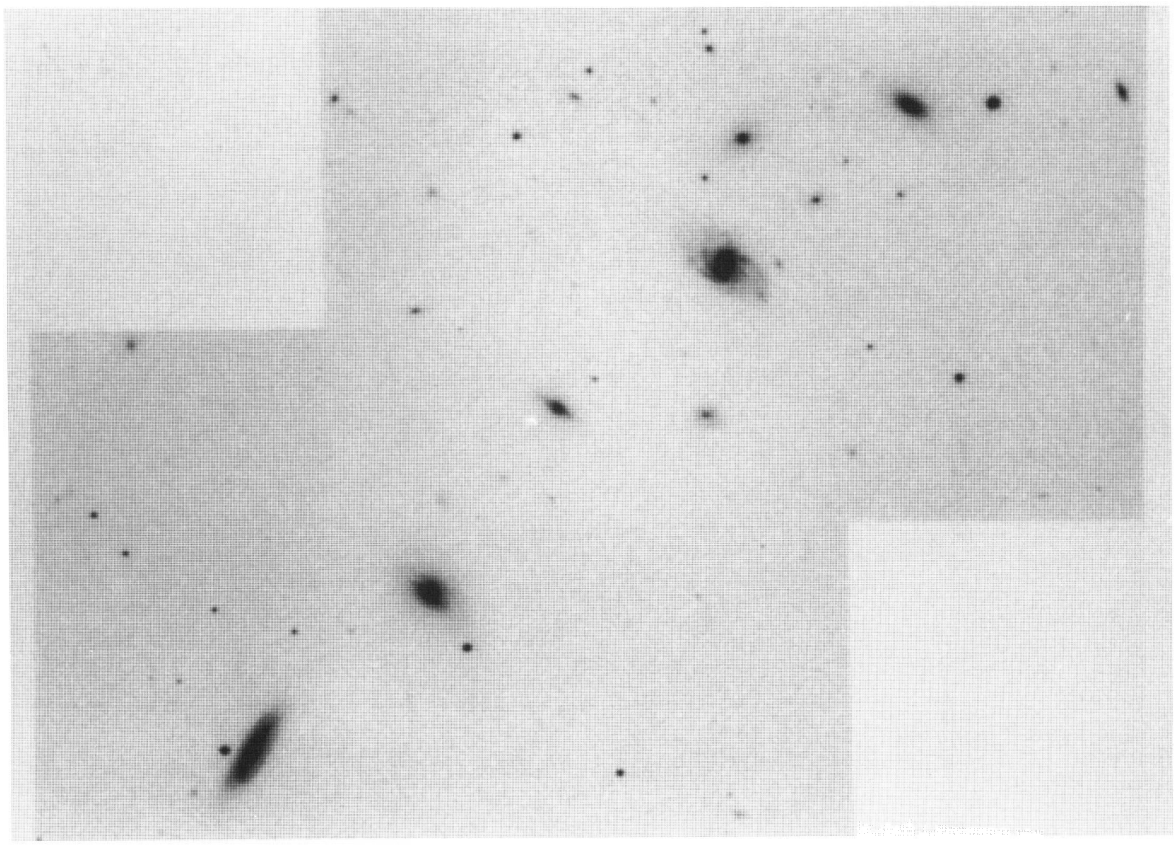
r.a. (1950)	(h m s)	04 16 59.63
dec. (1950)	(° ' ")	-11 49 43.9
galactic longitude	(°)	205.95
galactic latitude	(°)	-39.00
mean redshift		0.0874
total blue magnitude (B_{TC})		14.68
number of galaxies		6
number of accordant galaxies		4
median galaxy separation	(kpc)	107.2
radial velocity dispersion	(km/s)	123.0
crossing time	(Ht_c)	0.1072
mass-to-light ratio	($M_\odot/L_\odot$)	28.8

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	17 05.9	16 57.5	17 02.8	16 54.3	17 00.4	16 57.1
δ	(' ")	51 11.0	49 17.7	50 34.3	48 40.6	49 51.3	48 48.7
v	(km/s)	18340	18530	26352	26256	26044	26100
Δv	(km/s)	62	61	62	62	115	134
T		Sb	SBc	Sa	S0	S0	
a	(")	15.60	13.80	11.10	8.30	2.80	5.00
b	(")	5.90	8.50	8.00	4.50	2.80	3.90
B_{TC}		16.06	15.71	16.78	17.25	18.00	18.10
$B-R$		1.71	1.29	1.89	1.74	1.90	1.86
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)						27.86
name							

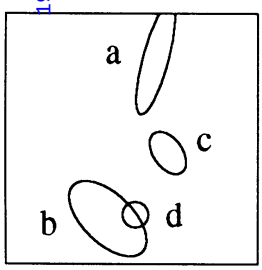


B



R

Group 28



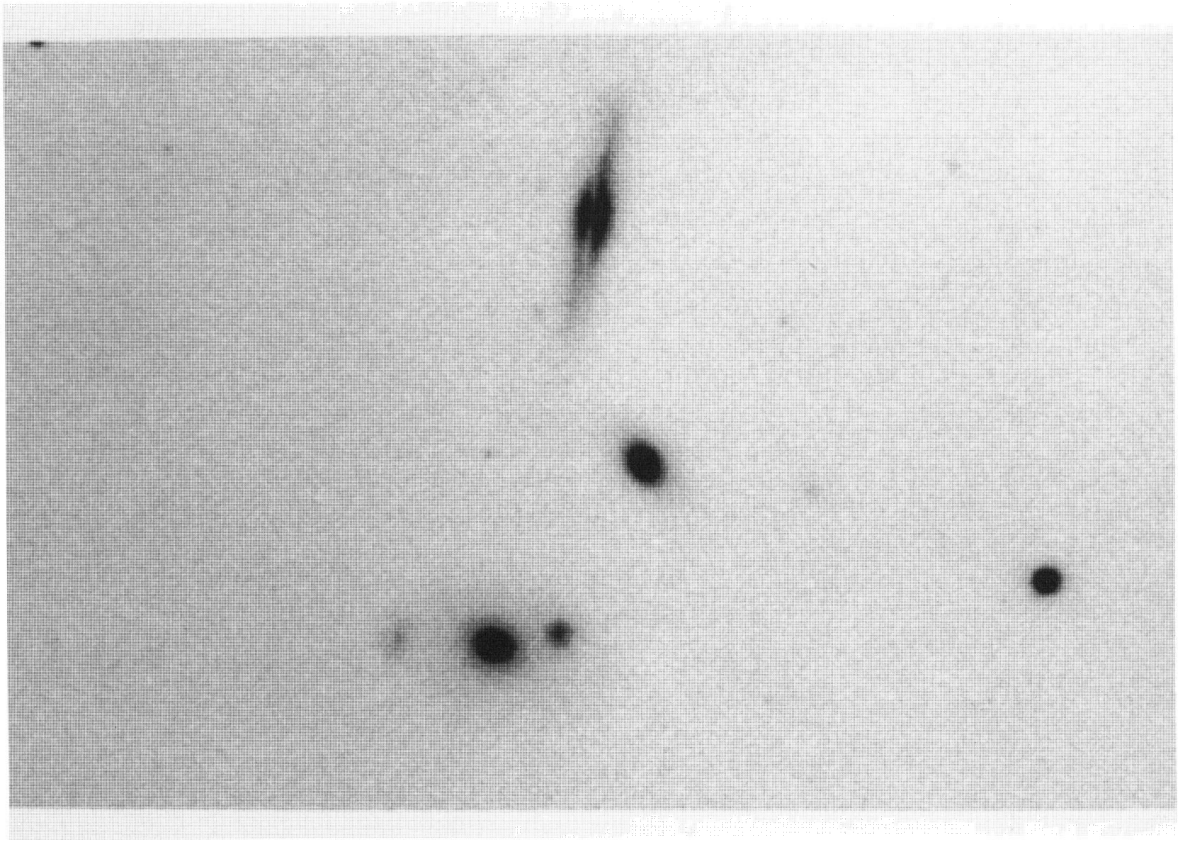
This group consists of a compact triplet and a small superimposed galaxy of much higher redshift. The triplet has a low velocity dispersion and contains a radio source (galaxy b).

GROUP DATA

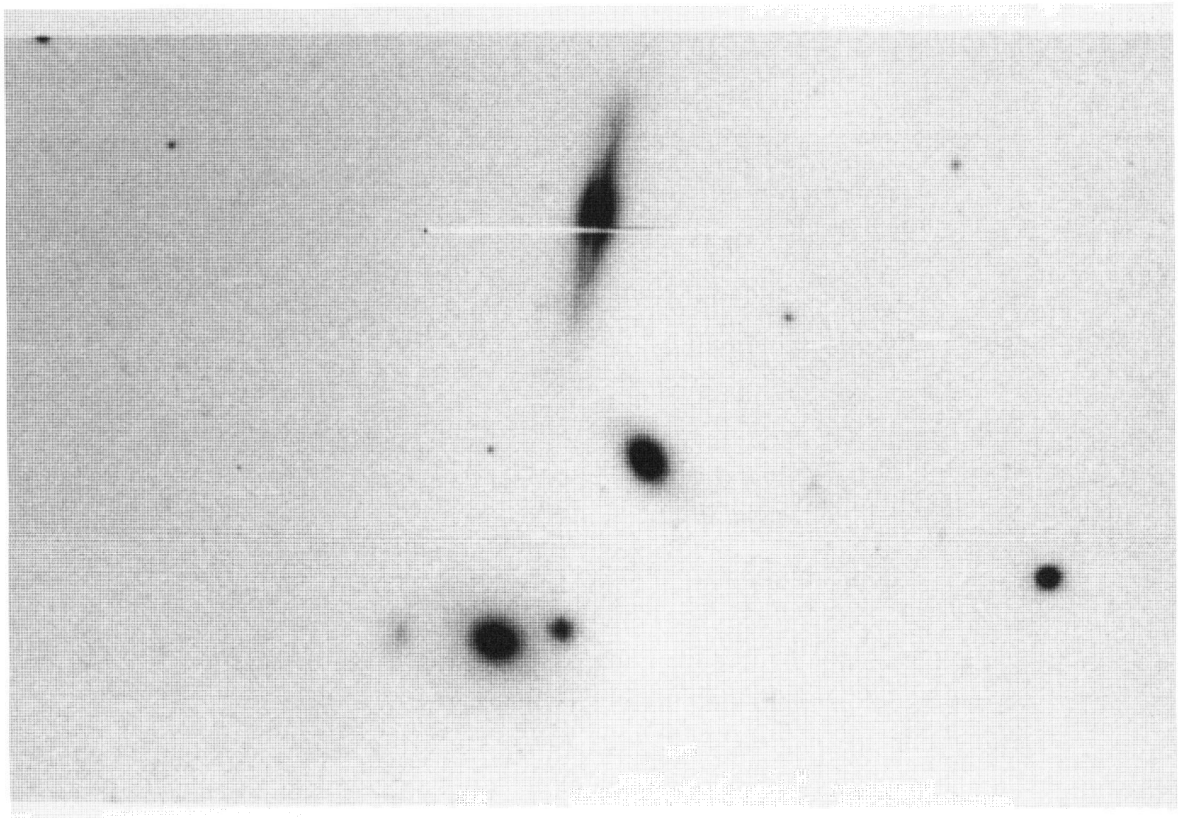
r.a. (1950)	(h m s)	04 24 56.46
dec. (1950)	(° ' ")	-10 25 47.7
galactic longitude	(°)	205.45
galactic latitude	(°)	-36.64
mean redshift		0.0380
total blue magnitude (B_{TC})		14.20
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	21.9
radial velocity dispersion	(km/s)	85.1
crossing time	(Ht_c)	0.0200
mass-to-light ratio	($M_\odot/L_\odot$)	6.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	24 56.0	24 57.5	24 55.7	24 56.7
δ	(' ")	25 01.7	26 13.5	25 43.9	26 11.7
v	(km/s)	11441	11489	11290	30205
Δv	(km/s)	26	23	26	63
T		Sb	E5	S0	Sdm
a	(")	25.70	21.40	10.80	5.80
b	(")	5.70	11.10	6.50	5.80
B_{TC}		15.33	15.31	15.76	17.40
$B-R$		1.33	1.19	1.26	1.15
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)		3.21		
name					

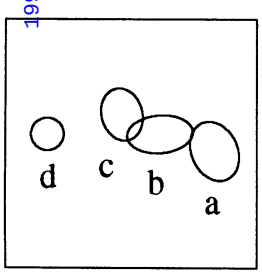


B



R

Group 29



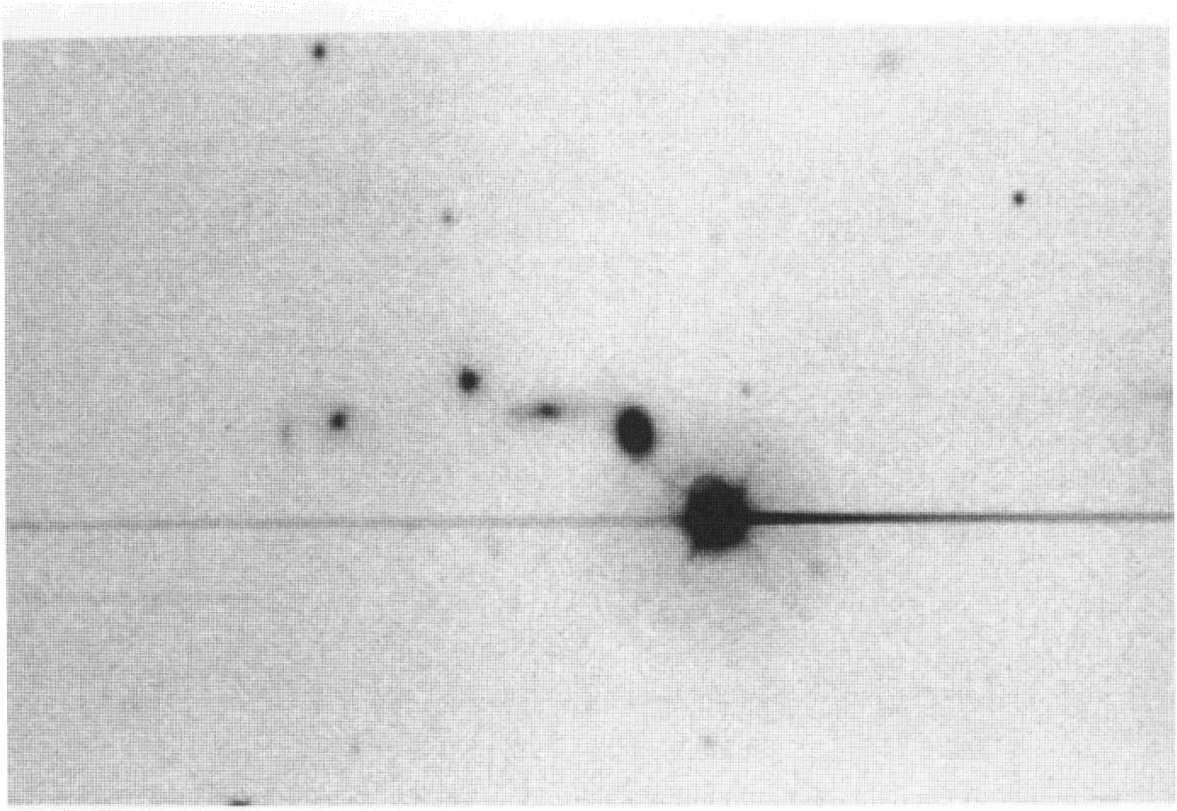
This interesting group is a nearly linear chain of four galaxies. The brightest is a blue conpact galaxy which has a redshift much lower than the other three early-type galaxies. The triplet has a rather large velocity dispersion and a very short crossing time.

GROUP DATA

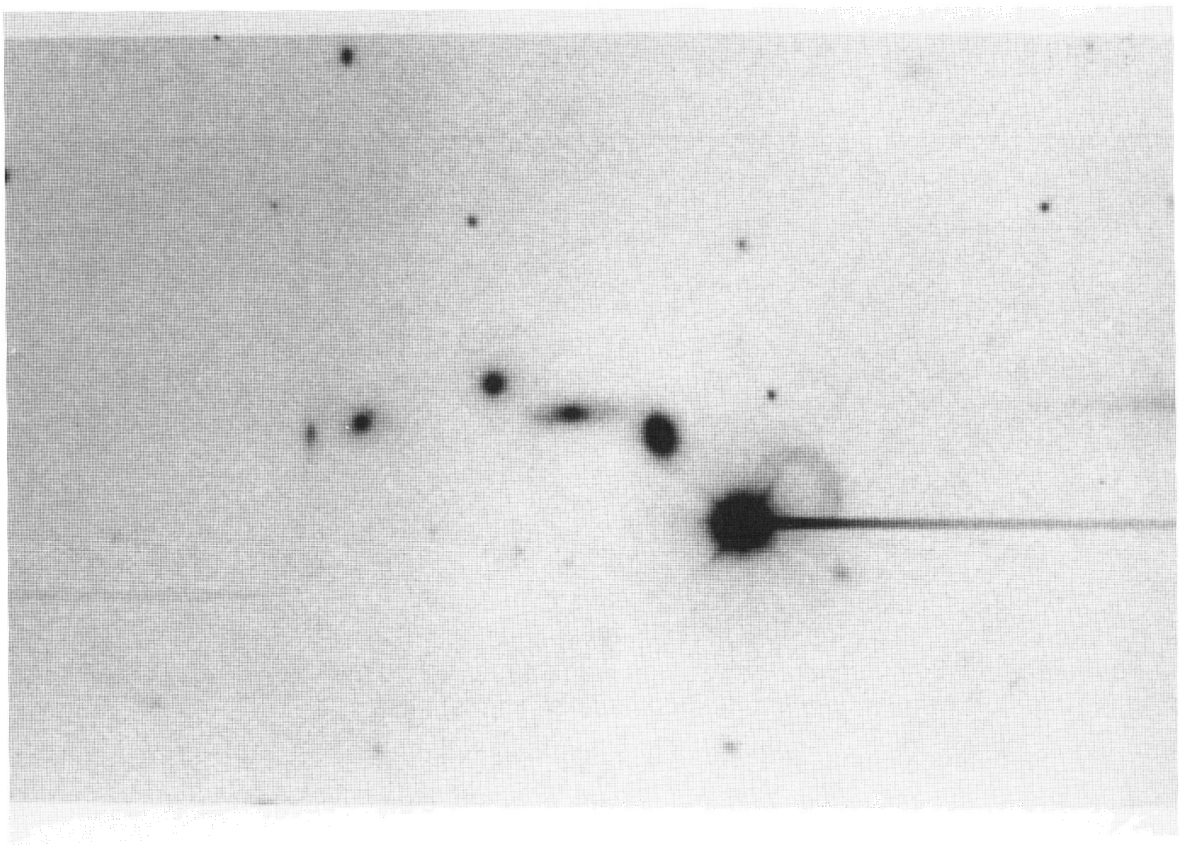
r.a. (1950)	(h m s)	04 32 48.37
dec. (1950)	(° ' ")	-30 38 44.8
galactic longitude	(°)	230.95
galactic latitude	(°)	-41.47
mean redshift		0.1047
total blue magnitude (B_{TC})		14.30
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	30.2
radial velocity dispersion	(km/s)	407.4
crossing time	(Ht_c)	0.0055
mass-to-light ratio	($M_\odot/L_\odot$)	154.9

GALAXY DATA

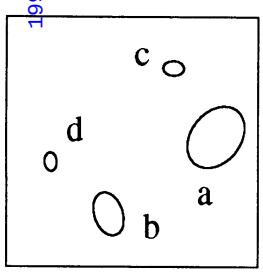
Galaxy:		a	b	c	d
α	(m s)	32 46.5	32 47.8	32 48.7	32 50.5
δ	(' ")	38 50.1	38 45.0	38 38.9	38 45.0
v	(km/s)	13328	30824	31669	31714
Δv	(km/s)	46	64	64	63
T		cI	S0	E2	SB0
a	(")	9.40	10.00	8.20	5.00
b	(")	7.00	5.80	6.20	5.00
B_{TC}		14.49	17.00	17.40	18.35
$B-R$		0.67	1.91	1.51	1.48
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 30



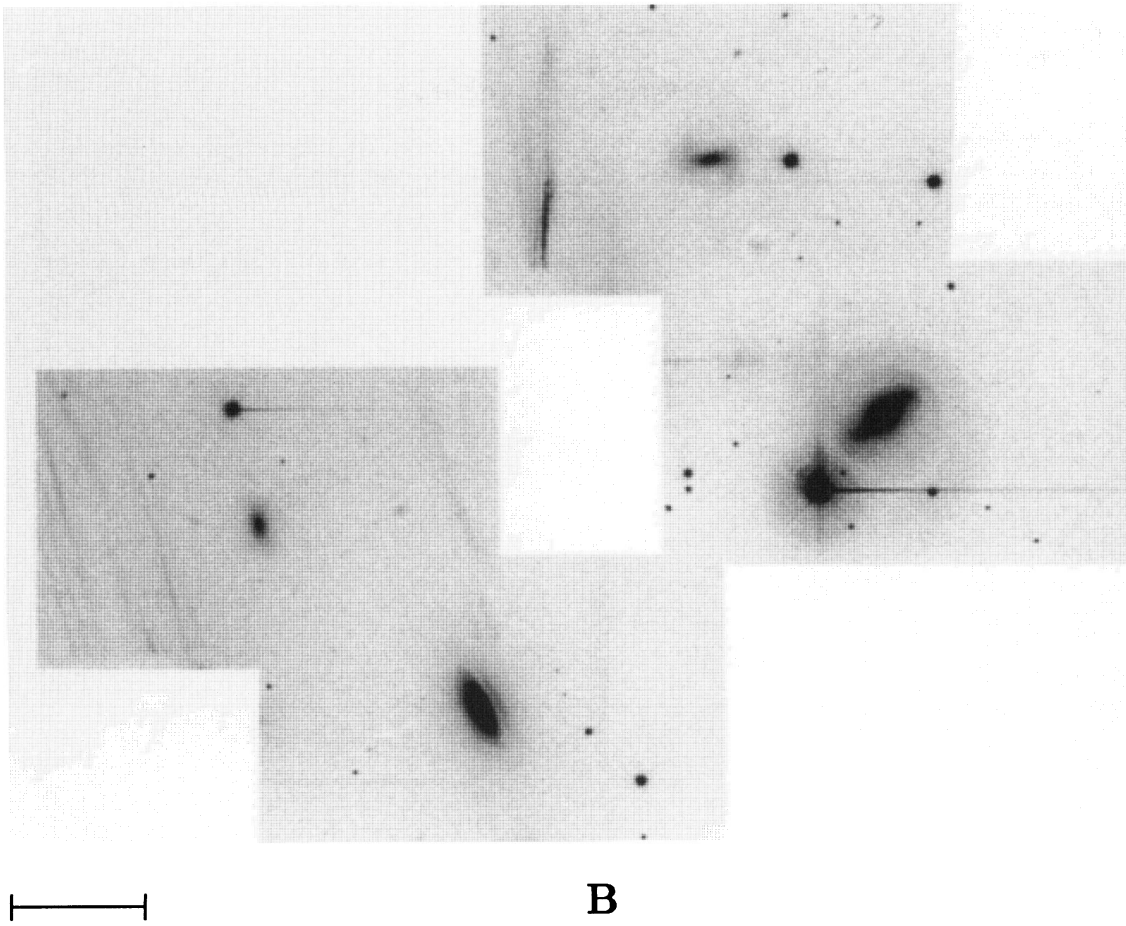
Group 30 is a relatively loose quartet of mostly spiral galaxies. It has a relatively low velocity dispersion and mass-to-light ratio.

GROUP DATA

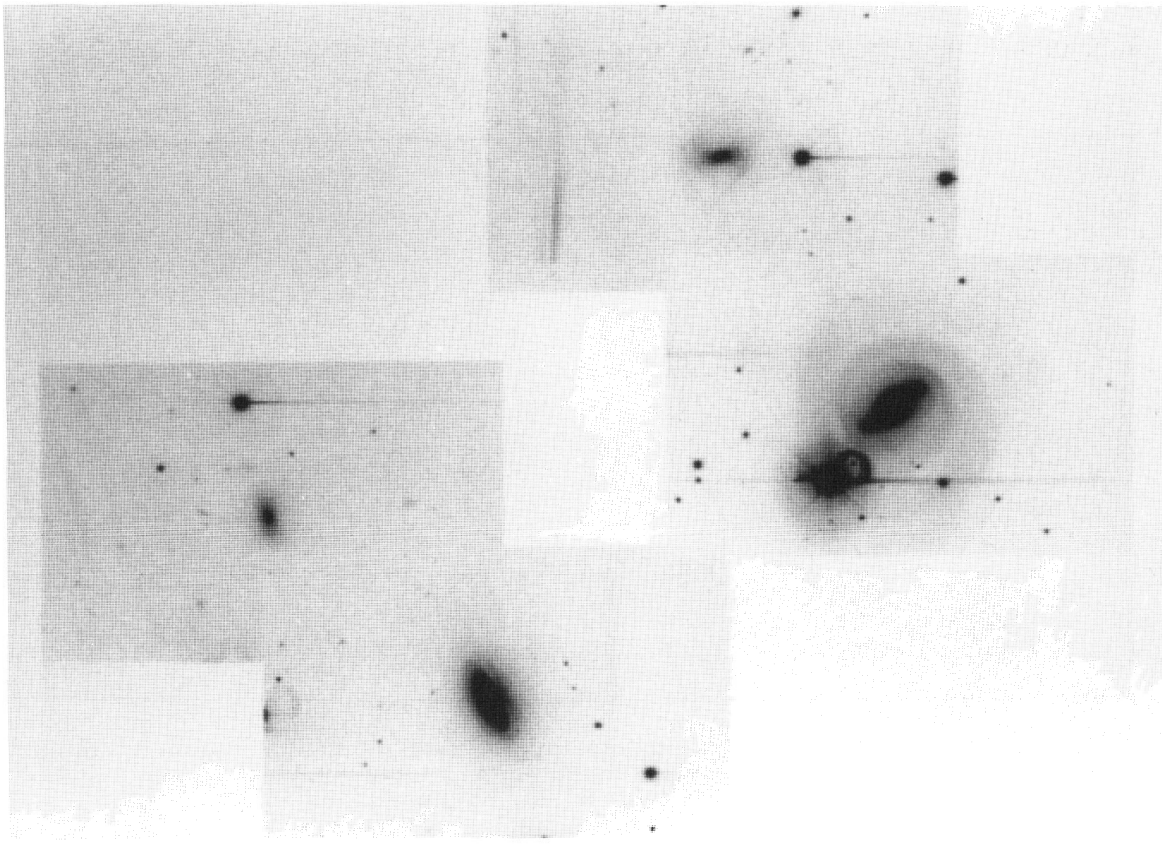
r.a. (1950)	(h m s)	04 33 56.6
dec. (1950)	(° ' ")	-02 56 09.1
galactic longitude	(°)	198.81
galactic latitude	(°)	-31.09
mean redshift		0.0154
total blue magnitude (B_{TC})		12.30
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	51.3
radial velocity dispersion	(km/s)	72.4
crossing time	(Ht_c)	0.0603
mass-to-light ratio	($M_\odot/L_\odot$)	10.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	33 48.0	33 59.7	33 52.6	34 06.1
δ	(' ")	55 55.7	58 01.9	54 02.2	56 36.7
v	(km/s)	4697	4625	4508	4666
Δv	(km/s)	20	24	38	49
T		SBa	Sa	SBbc	S0
a	(")	5.50	36.50	17.30	15.40
b	(")	40.50	23.50	12.50	10.20
B_{TC}		12.87	13.65	15.06	15.69
$B-R$		2.11	1.63	1.12	1.53
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

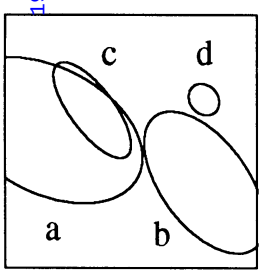


B



R

Group 31



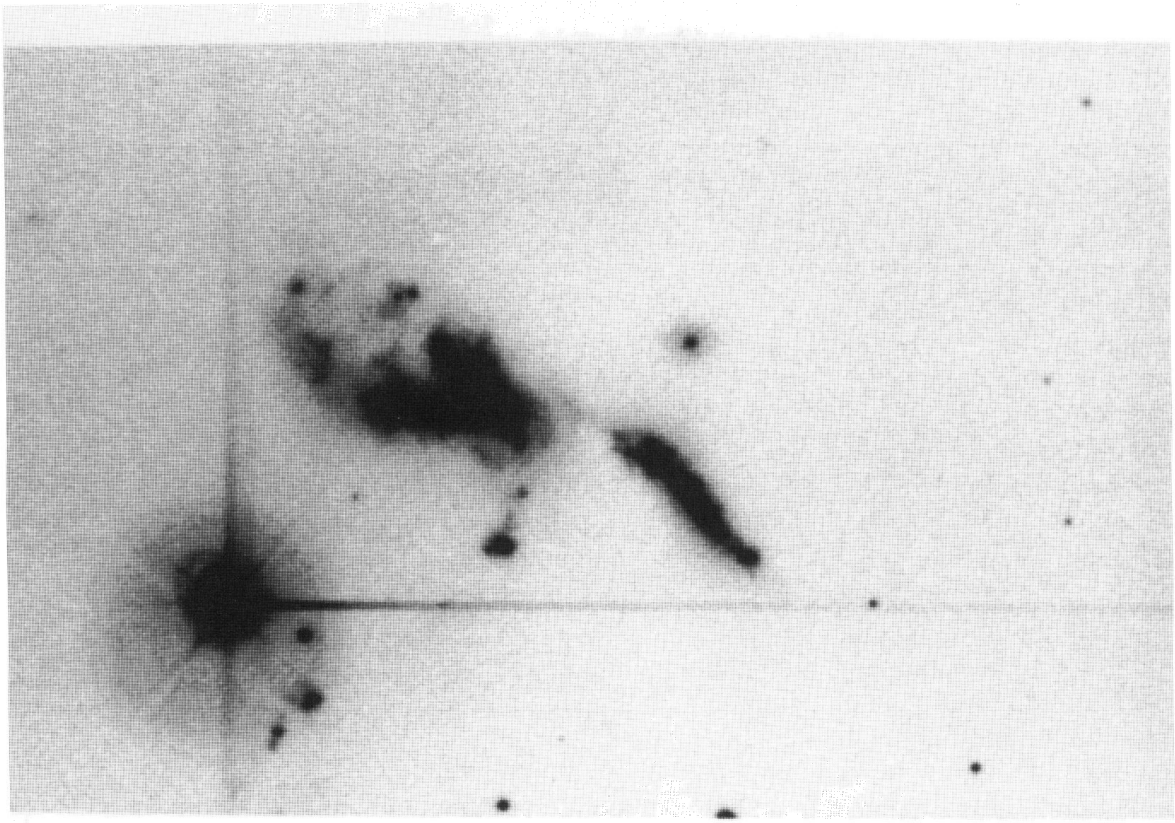
Group 31 consists of a triplet of gas-rich galaxies and a nearby fainter galaxy at high redshift. Galaxy c is Markarian 1089 a strong emission-line object and infrared source. It is in contact with, or is part of, galaxy a, which is a radio source. The triplet is extremely compact and has a low velocity dispersion.

GROUP DATA

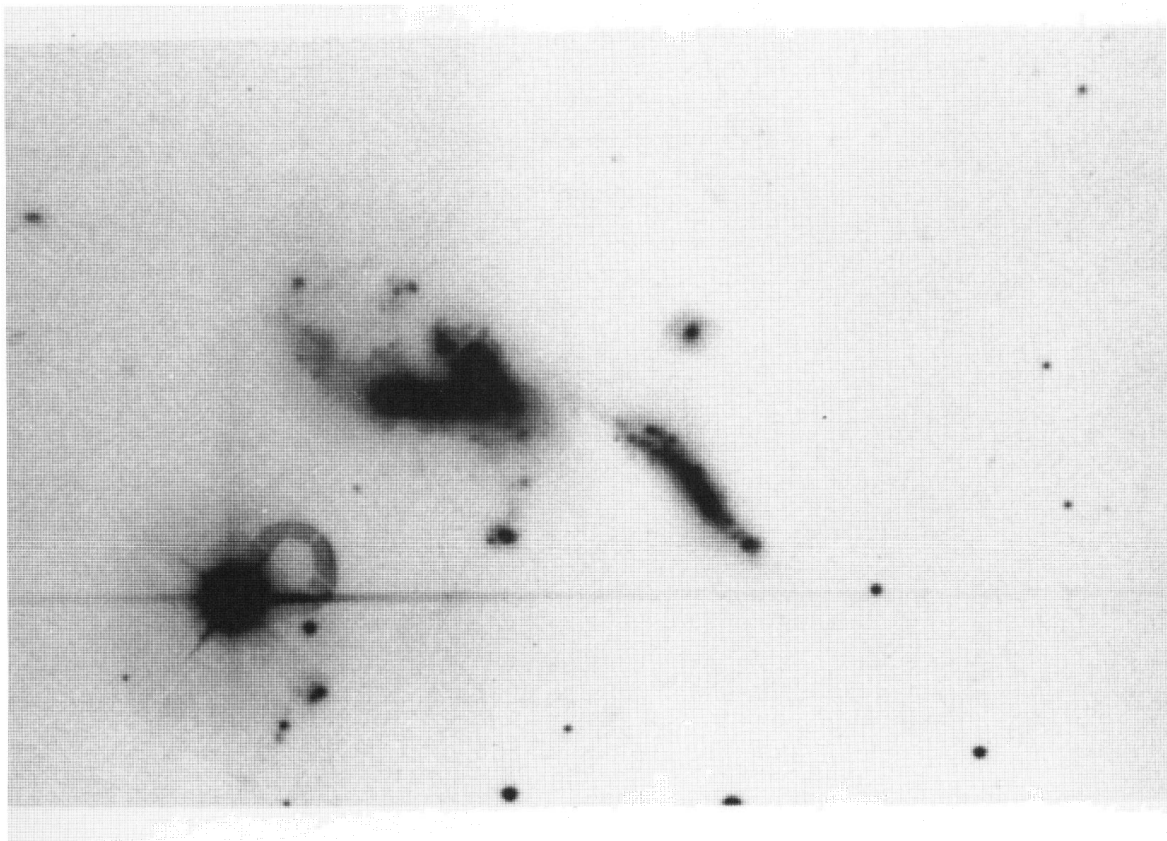
r.a. (1950)	(h m s)	04 59 07.96
dec. (1950)	(° ' ")	-04 19 52.0
galactic longitude	(°)	203.72
galactic latitude	(°)	-26.30
medn redshift		0.0137
total blue magnitude (B_{TC})		12.20
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	8.1
radial velocity dispersion	(km/s)	56.2
crossing time	(Ht_c)	0.0158
mass-to-light ratio	($M_\odot/L_\odot$)	1.2

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	59 09.9	59 06.5	59 08.9	59 06.5
δ	(' ")	19 51.8	20 08.4	19 45.5	19 42.2
v	(km/s)	4042	4171	4068	26900
Δv	(km/s)	44	43	34	65
T		Sdm	Sm	Im	Sbc
a	(")	32.30	26.10	18.30	5.40
b	(")	19.90	13.70	7.00	4.50
B_{TC}		14.83	14.31	12.50	17.27
$B-R$		1.13	0.70	0.82	1.34
$\log F_{60\mu}$	(Jy)			4.02	
$\log F_{100\mu}$	(Jy)			5.03	
$\log F_{20cm}$	(mJy)	13.03			
name		N1741		M1089	

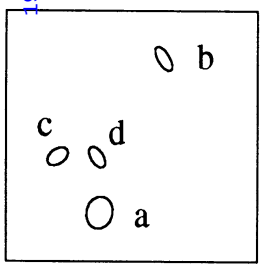


B



R

Group 32



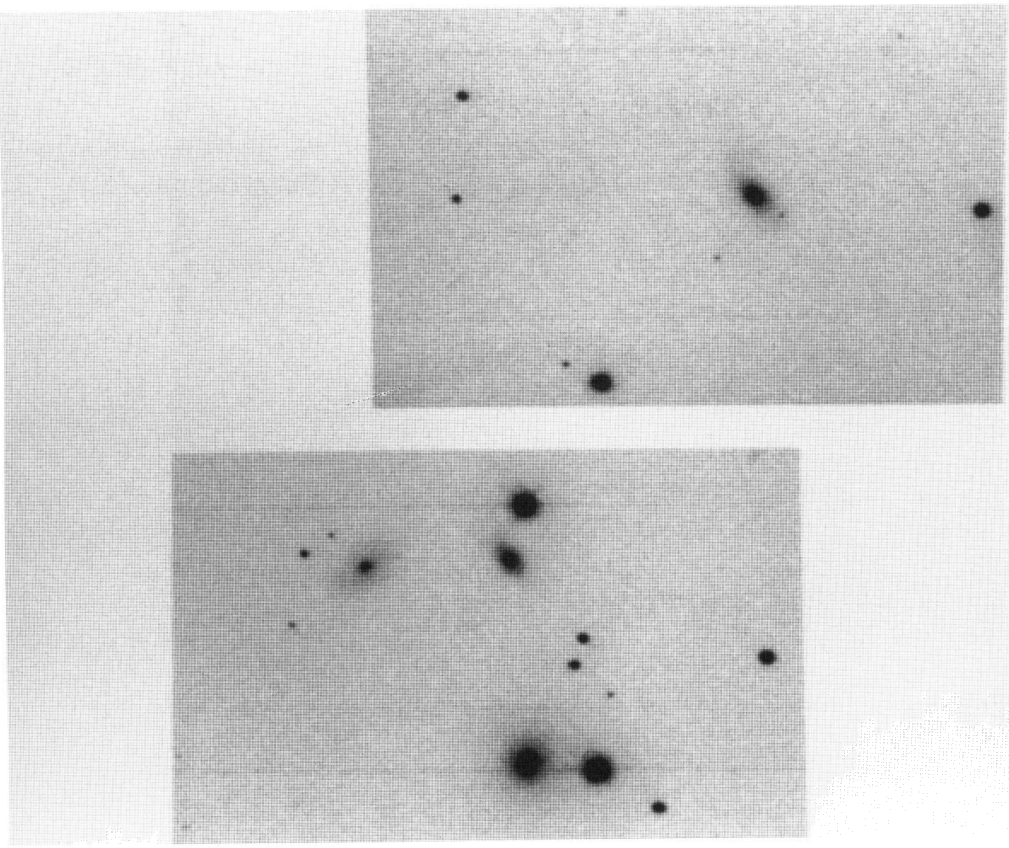
This anonymous quartet of early-type galaxies has dynamical properties typical of most compact groups.

GROUP DATA

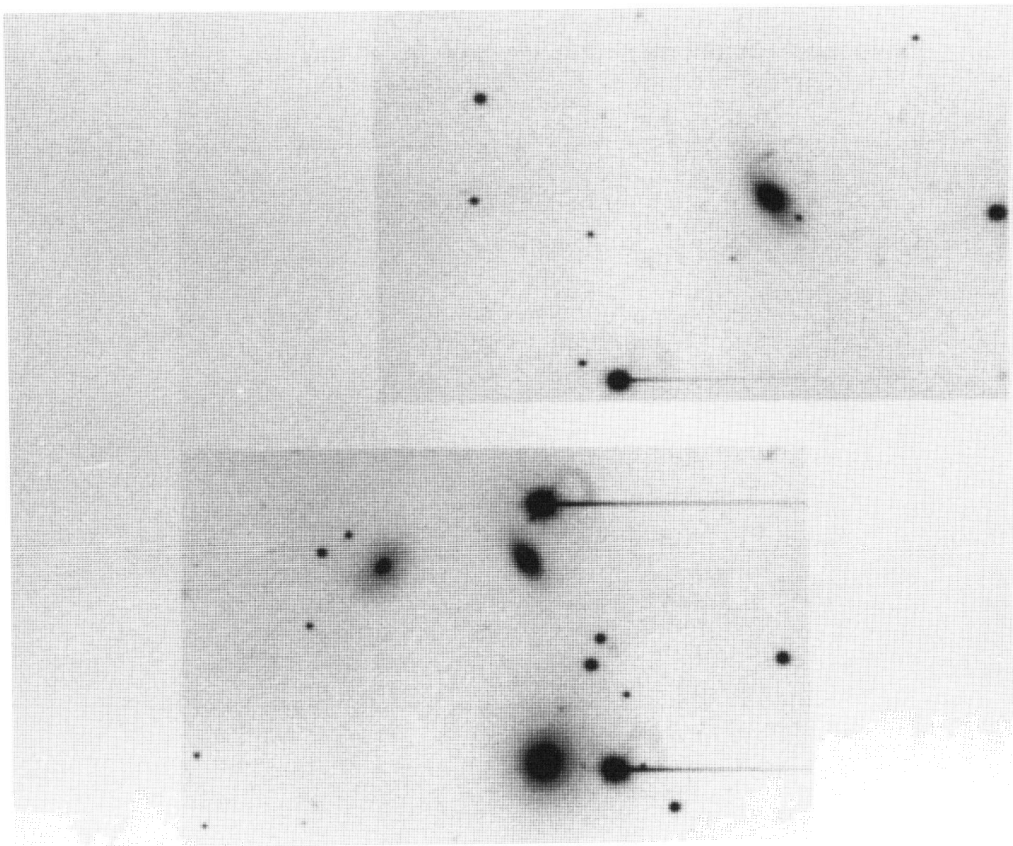
r.a. (1950)	(h m s)	04 59 28.99
dec. (1950)	(° ' ")	-15 29 54.8
galactic longitude	(°)	215.23
galactic latitude	(°)	-31.09
mean redshift		0.0408
total blue magnitude (B_{TC})		13.39
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	61.7
radial velocity dispersion	(km/s)	208.9
crossing time	(Ht_c)	0.0219
mass-to-light ratio	($M_\odot/L_\odot$)	40.7

GALAXY DATA

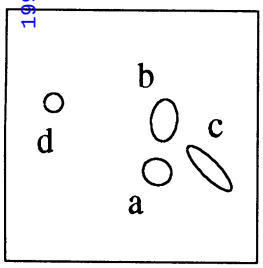
Galaxy:		a	b	c	d
α	(m s)	59 29.4	59 24.2	59 32.8	59 29.6
δ	(' ")	31 12.8	28 11.6	30 07.0	30 07.8
v	(km/s)	12547	12125	11984	12313
Δv	(km/s)	38	57	49	52
T		E2	SB0	S0a	S0
a	(")	18.90	16.10	13.70	13.70
b	(")	15.30	6.70	8.70	7.30
B_{TC}		13.80	15.28	16.00	16.74
$B-R$		1.44	1.47	1.73	1.76
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 33



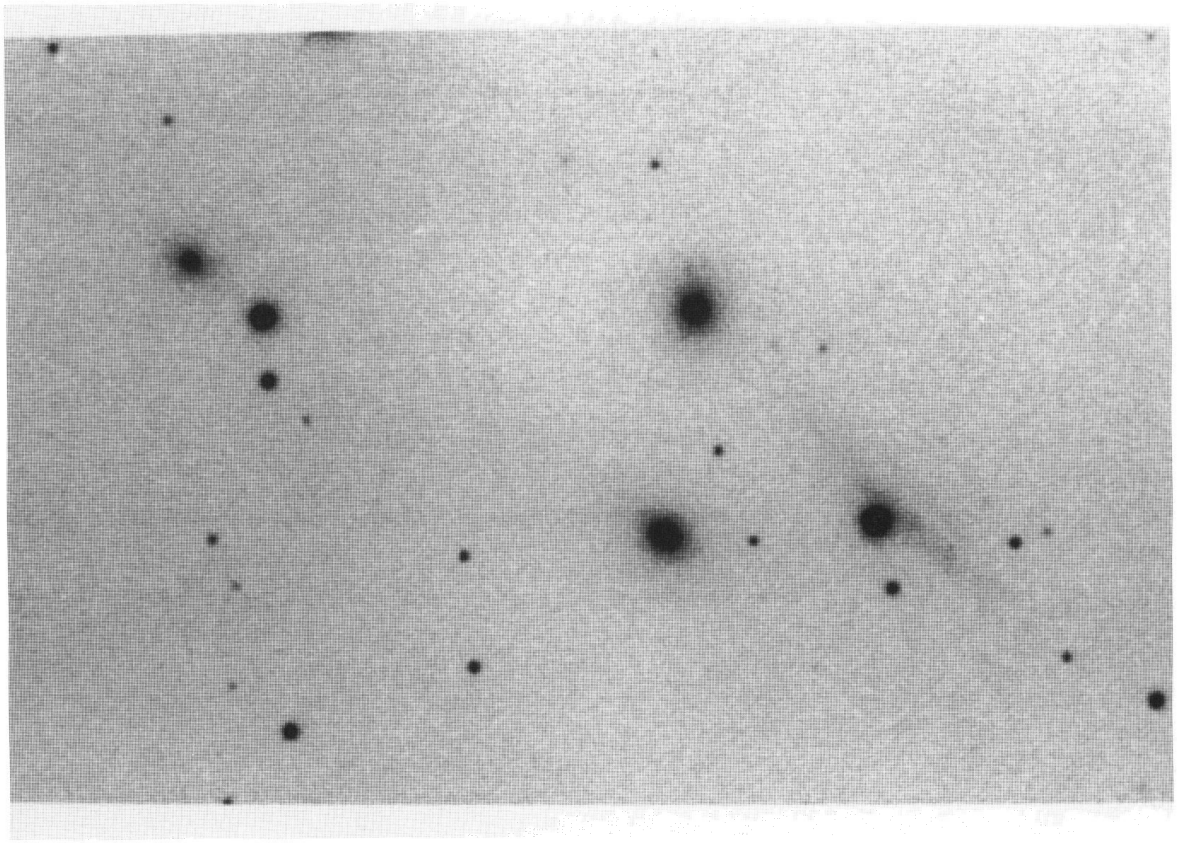
Group 33 is a compact quartet of mostly elliptical galaxies. The three brightest galaxies appear to be practically in contact. The bright elliptical galaxy (a) is a relatively strong radio source. The spiral galaxy (c) is a weak infrared and radio source.

GROUP DATA

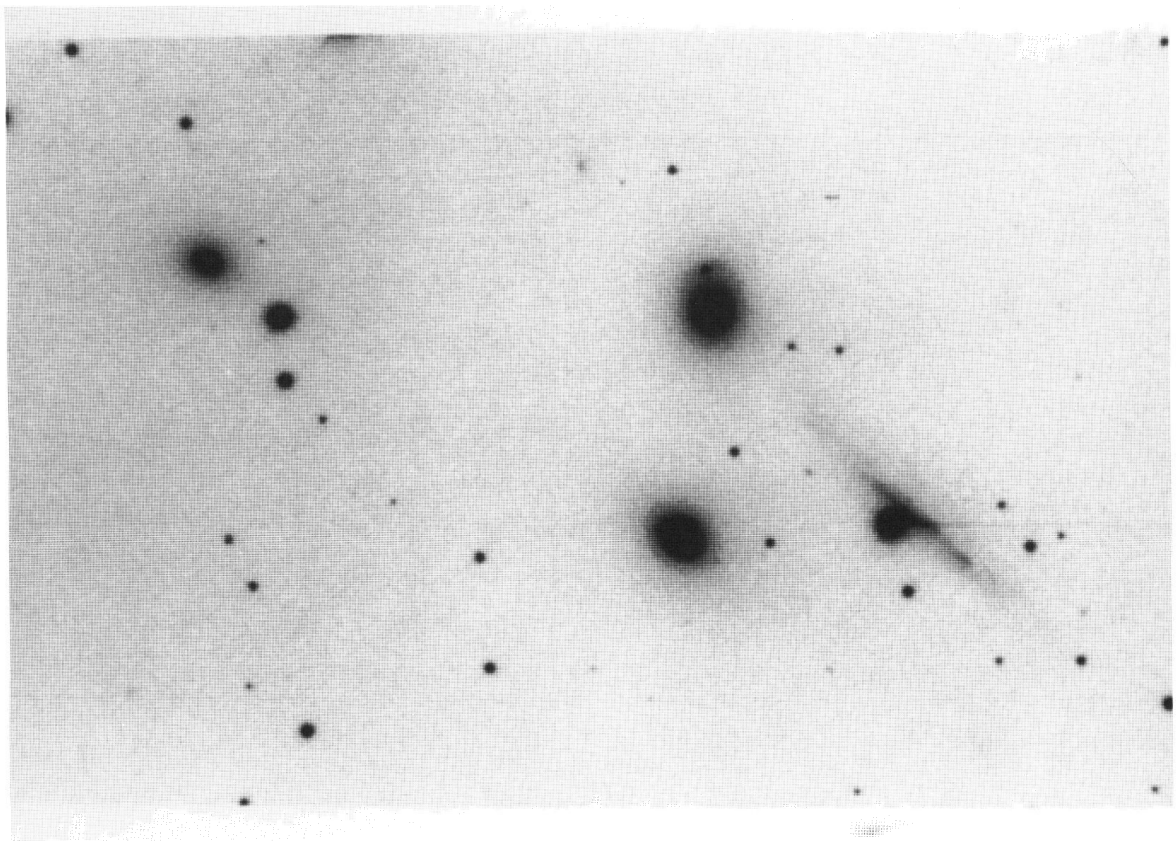
r.a. (1950)	(h m s)	05 07 53.69
dec. (1950)	(° ' ")	+17 57 51.0
galactic longitude	(°)	184.83
galactic latitude	(°)	-12.63
mean redshift		0.0260
total blue magnitude (B_{TC})		14.31
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	24.5
radial velocity dispersion	(km/s)	154.9
crossing time	(Ht_c)	0.0120
mass-to-light ratio	($M_\odot/L_\odot$)	45.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	07 53.1	07 52.7	07 50.3	07 58.7
δ	(' ")	57 27.5	58 06.7	57 30.5	58 19.2
v	(km/s)	7570	8006	7823	7767
Δv	(km/s)	41	21	47	37
T		E1	E4	Sd	E0
a	(")	11.10	15.90	23.30	7.20
b	(")	10.10	10.00	6.70	7.20
B_{TC}		15.35	15.41	16.40	16.73
$B-R$		2.34	2.31	2.32	2.20
$\log F_{60\mu}$	(Jy)	45.92		0.65	
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

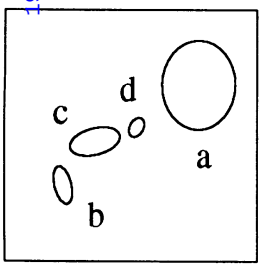


B



R

Group 34



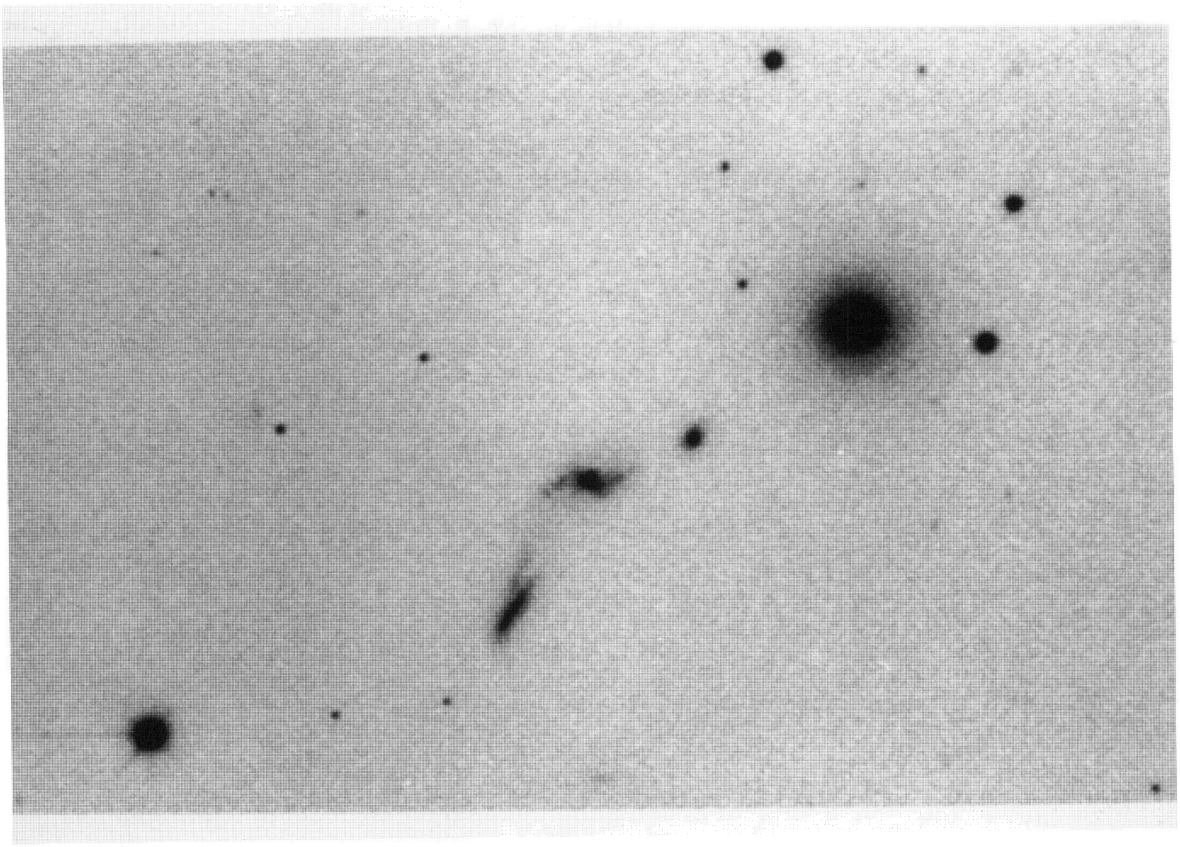
This group is well known as Arp 327, and also VV 169. It consists of a dominant elliptical galaxy from which extends a short chain of three fainter galaxies. The median intergalaxy separation is only $15h^{-1}kpc$. THis, coupled with the relatively high velocity dispersion gives a very short crossing time for the group. The three brightest galaxies are all radio sources.

GROUP DATA

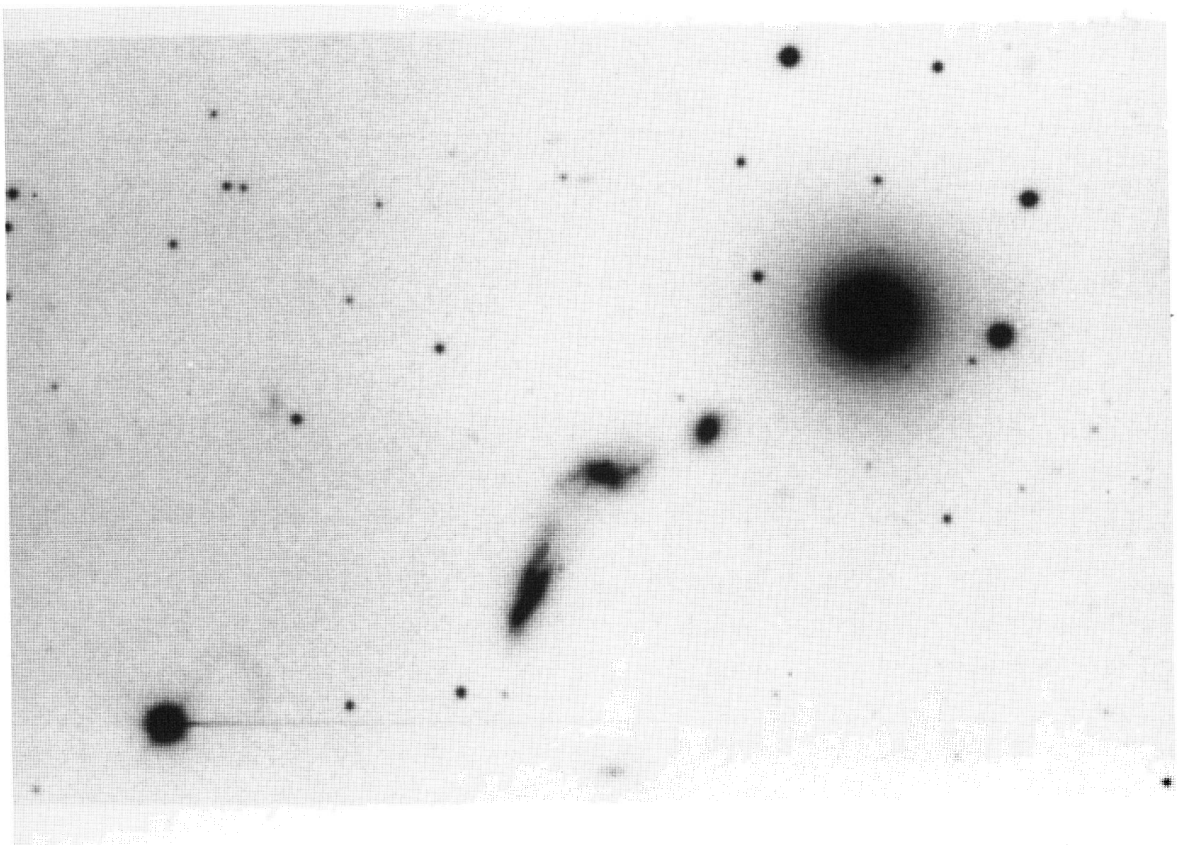
r.a. (1950)	(h m s)	05 19 06.72
dec. (1950)	(° ' ")	+06 38 05.7
galactic longitude	(°)	196.19
galactic latitude	(°)	-16.49
mean redshift		0.0307
total blue magnitude (B_{TC})		13.91
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	15.5
radial velocity dispersion	(km/s)	316.2
crossing time	(Ht_c)	0.0036
mass-to-light ratio	($M_\odot/L_\odot$)	100.0

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	19 04.5	19 08.5	19 07.6	19 06.3
δ	(' ")	38 27.5	37 43.6	38 02.7	38 08.9
v	(km/s)	8997	9620	9392	8817
Δv	(km/s)	31	40	40	66
T		E2	Sd	SBd	S0
a	(")	19.60	8.50	11.20	4.50
b	(")	16.10	3.70	5.80	3.00
B_{TC}		14.20	16.56	16.28	17.57
$B-R$		2.11	2.11	1.58	2.08
$\log F_{60\mu}$	(Jy)		1.33		
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	4.71	6.06	0.46	
name		N1875			

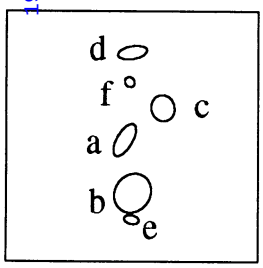


B



R

Group 35



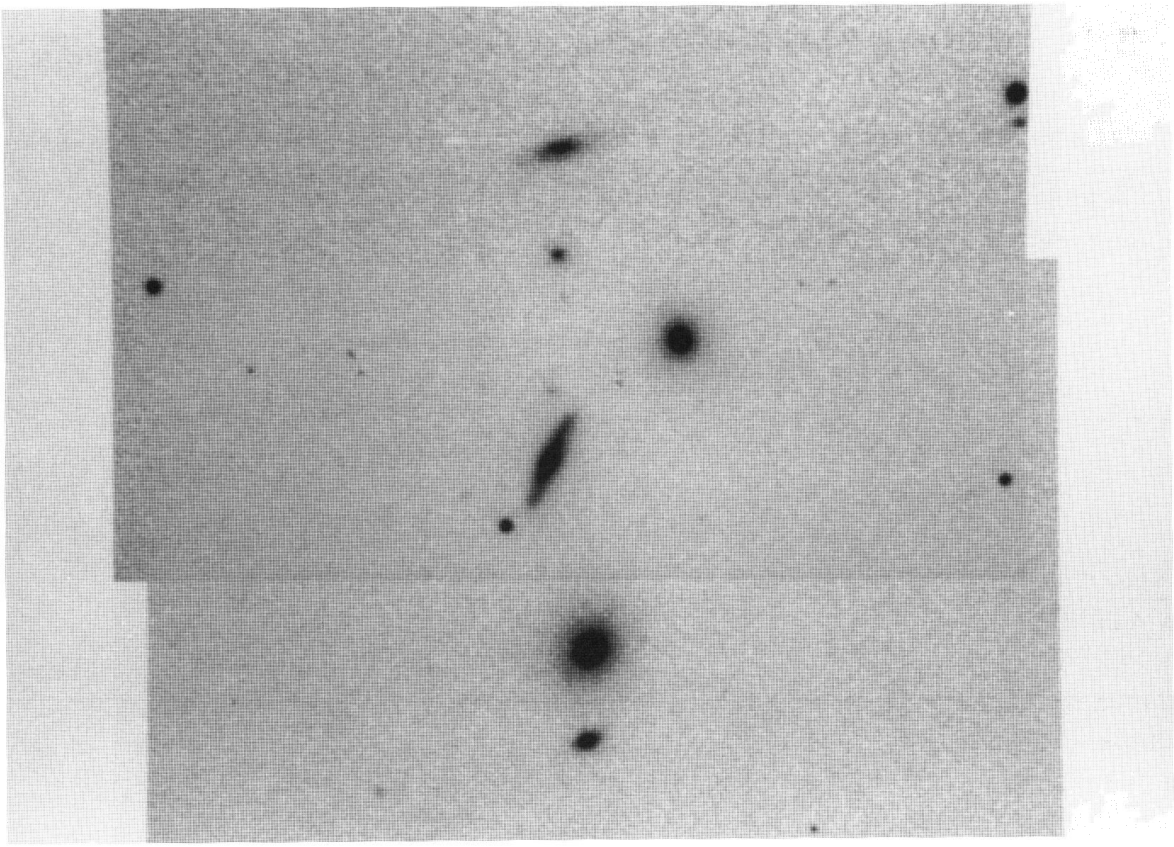
This sextet contains only one gas-rich galaxy (d). It has a higher than average velocity dispersion and mass-to-light ratio.

GROUP DATA

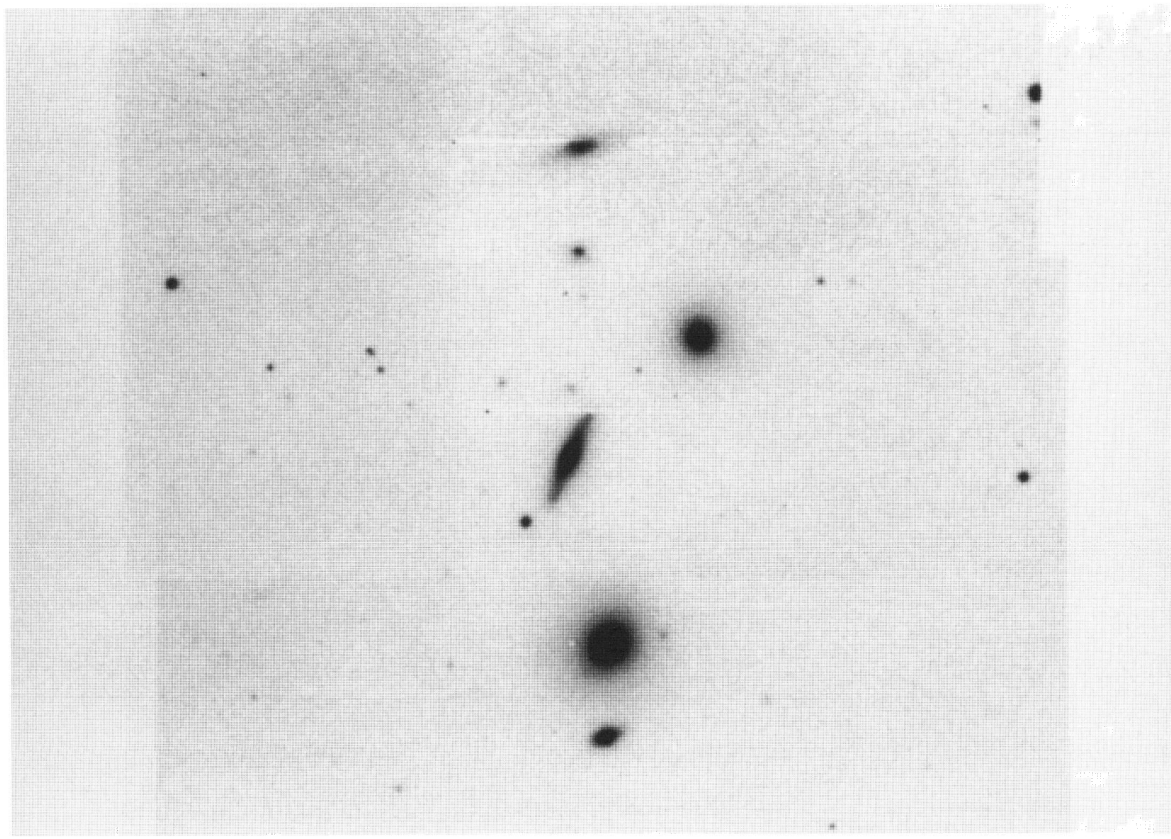
r.a. (1950)	(h m s)	08 41 56.87
dec. (1950)	(° ' ")	+44 42 16.4
galactic longitude	(°)	176.12
galactic latitude	(°)	+38.48
mean redshift		0.0542
total blue magnitude (B_{TC})		14.04
number of galaxies		6
number of accordant galaxies		6
median galaxy separation	(kpc)	44.7
radial velocity dispersion	(km/s)	316.2
crossing time	(Ht_c)	0.0105
mass-to-light ratio	($M_\odot/L_\odot$)	81.3

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	41 57.7	41 57.1	41 54.9	41 57.1	41 57.2	41 57.3
δ	(' ")	42 10.5	41 29.0	42 35.7	43 19.0	41 08.4	42 56.0
v	(km/s)	15919	16338	16357	15798	16773	16330
Δv	(km/s)	38	32	39	40	57	62
T		S0	E1	E1	Sb	S0	E1
a	(")	14.40	15.80	10.40	11.60	5.90	4.10
b	(")	6.10	13.70	9.10	5.00	3.50	3.70
B_{TC}		15.56	15.13	15.69	16.81	17.05	18.12
$B-R$		1.69	1.36	1.91	1.89	1.61	1.86
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)						
name							

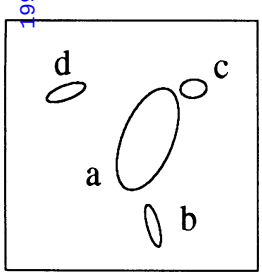


B



R

Group 36



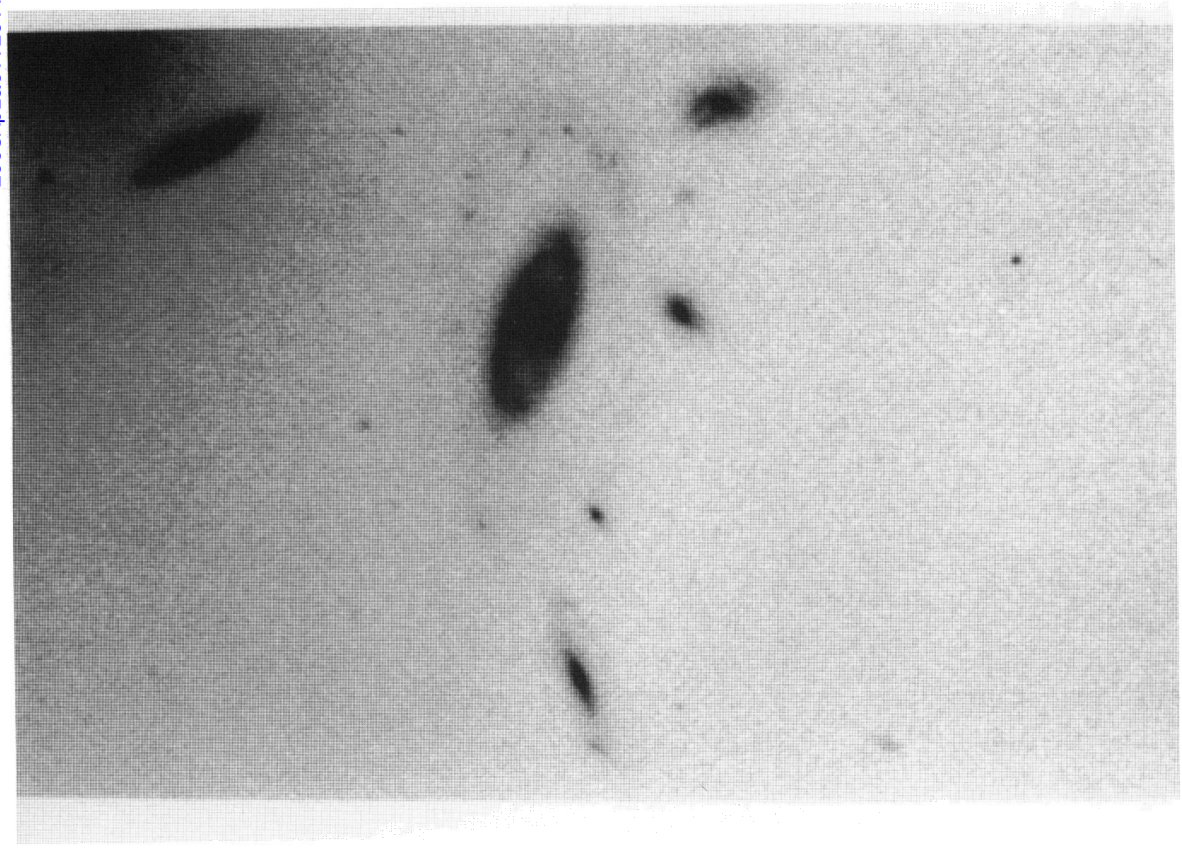
Group 36 contains four galaxies, all with rather different redshifts. It is presumed to be a chance alignment of unrelated galaxies.

GROUP DATA

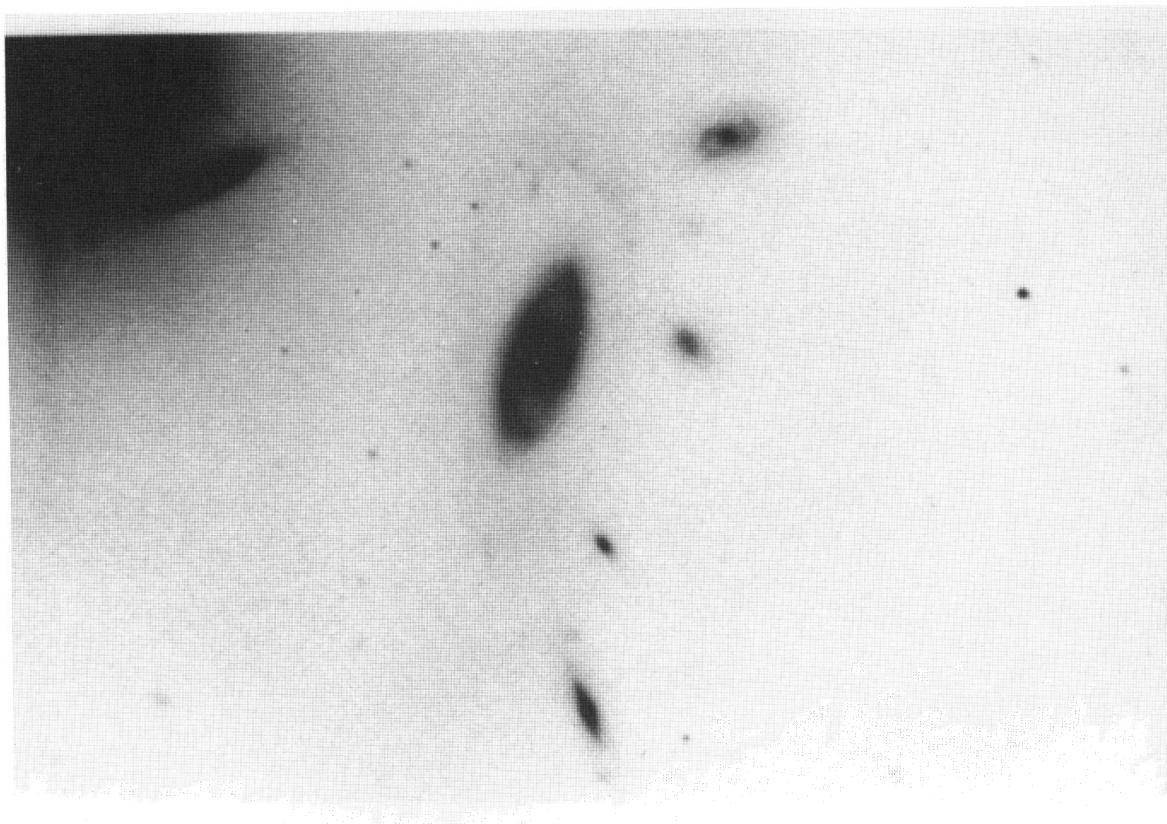
r.a. (1950)	(h m s)	09 06 36.19
dec. (1950)	(° ' ")	+15 59 59.9
galactic longitude	(°)	213.38
galactic latitude	(°)	+37.52
mean redshift		
total blue magnitude (B_{TC})		14.09
number of galaxies		4
number of accordant galaxies		0
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	06 35.8	06 39.8	06 33.6	06 35.6
δ	(' ")	59.58.0	00 30.8	00 33.6	58 57.2
v	(km/s)	3808	6333	8635	15668
Δv	(km/s)	29	41	45	62
T		Sb	Sc	Scd	Sbc
a	(")	38.00	14.30	9.20	15.10
b	(")	17.50	5.00	6.50	4.10
B_{TC}		14.50	15.98	16.86	17.08
$B-R$		1.50	1.21	1.16	1.51
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		I528			

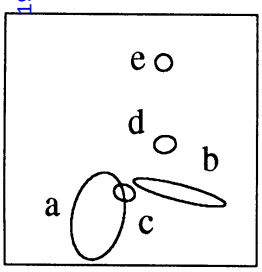


B



R

Group 37



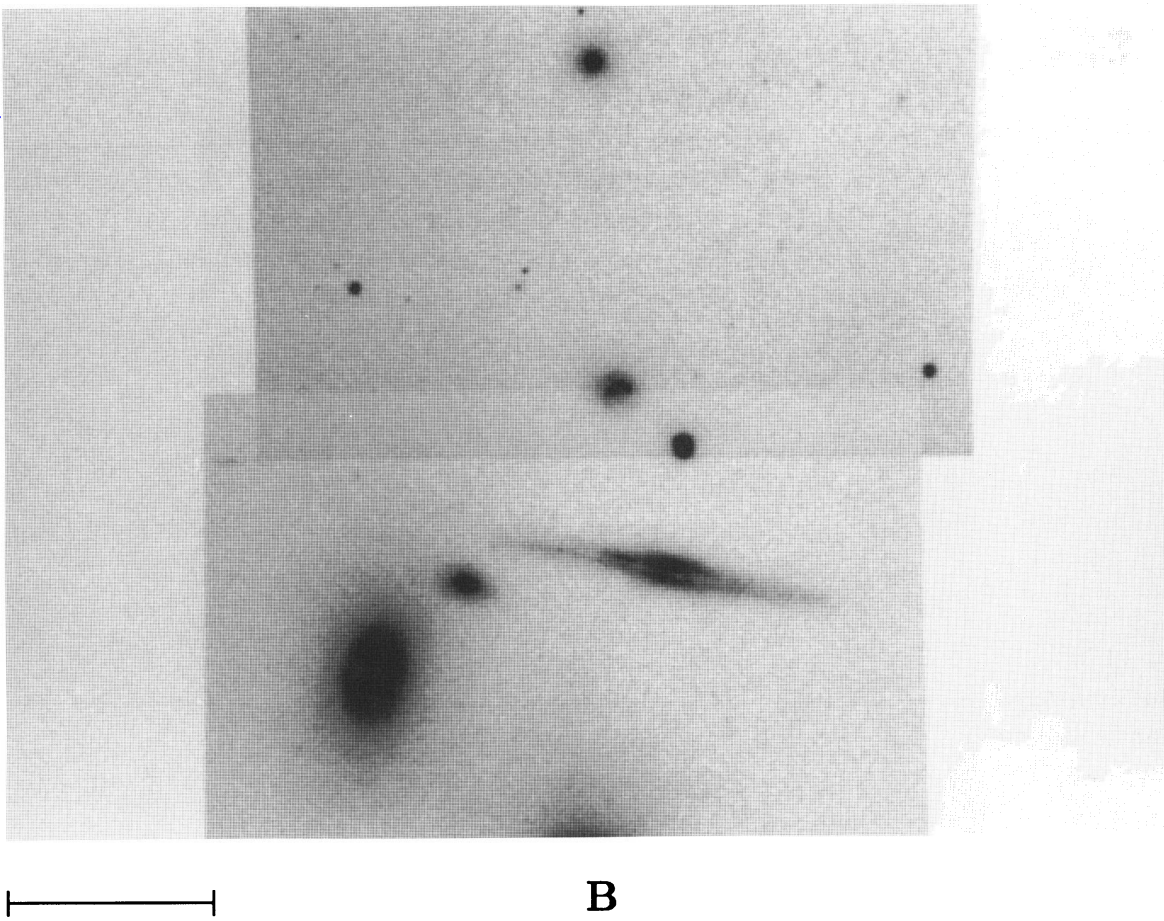
This group is a compact quintet with two dominant galaxies. It contains three radio sources (a, b and d). The brightest spiral galaxy (b) is also an infrared source. The group has a high velocity dispersion and mass-to-light ratio, and a short crossing time.

GROUP DATA

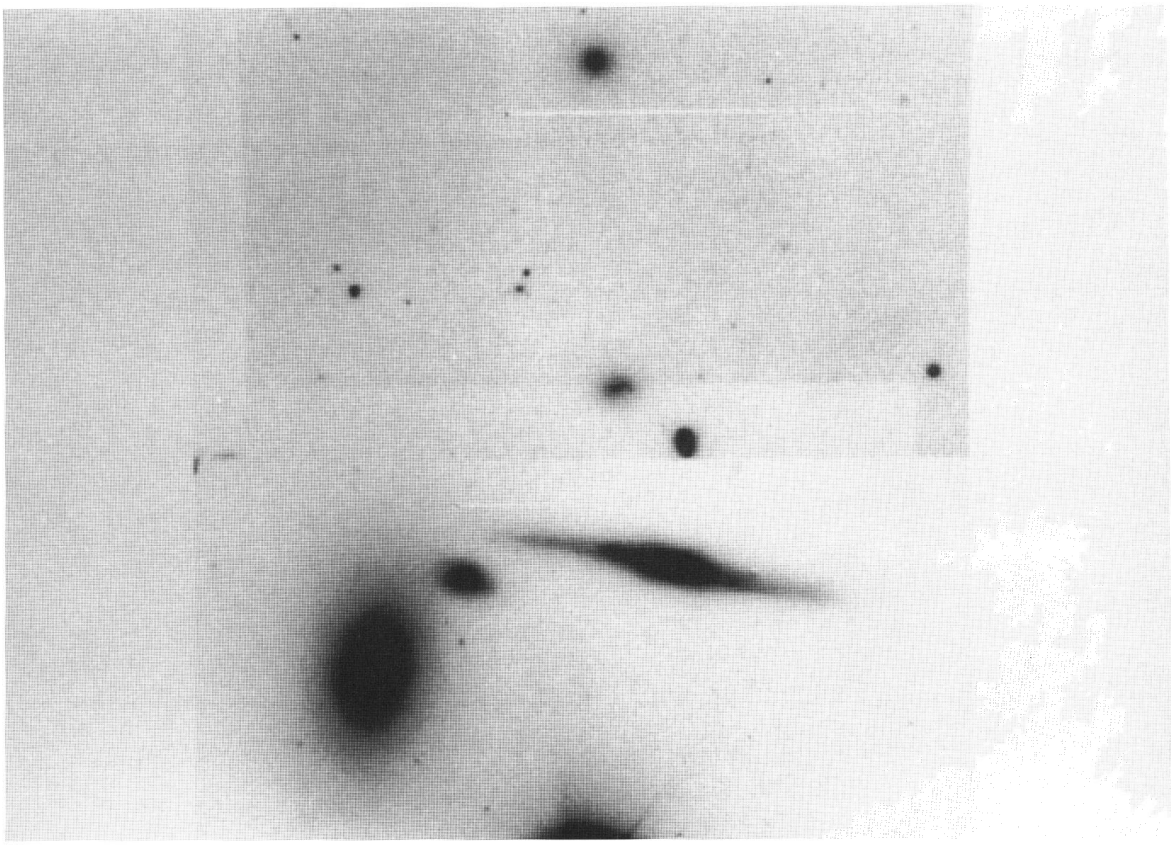
r.a. (1950)	(h m s)	09 10 35.78
dec. (1950)	(° ' ")	+30 12 58.0
galactic longitude	(°)	195.92
galactic latitude	(°)	+42.53
mean redshift		0.0223
total blue magnitude (B_{TC})		12.56
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	28.8
radial velocity dispersion	(km/s)	398.1
crossing time	(Ht_c)	0.0054
mass-to-light ratio	($M_\odot/L_\odot$)	123.0

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	10 39.8	10 33.0	10 37.6	10 34.2	10 34.3
δ	(' ")	11 57.9	12 24.0	12 23.4	13 16.8	14 48.0
v	(km/s)	6745	6741	7357	6207	6363
Δv	(km/s)	20	34	41	50	20
T		E7	Sbc	S0a	SBdm	E0
a	(")	48.40	51.90	11.90	12.00	9.10
b	(")	28.10	8.60	8.70	9.50	9.10
B_{TC}		12.97	14.50	15.57	15.87	16.21
$B-R$		1.79	1.99	1.76	0.51	1.02
$\log F_{60\mu}$	(Jy)		0.56			
$\log F_{100\mu}$	(Jy)		1.91			
$\log F_{20cm}$	(mJy)	27.69	3.57		1.28	
name		N2783	U4856			

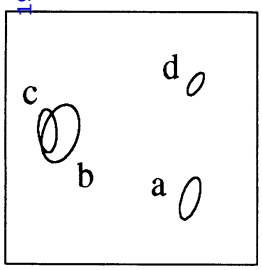


B



R

Group 38



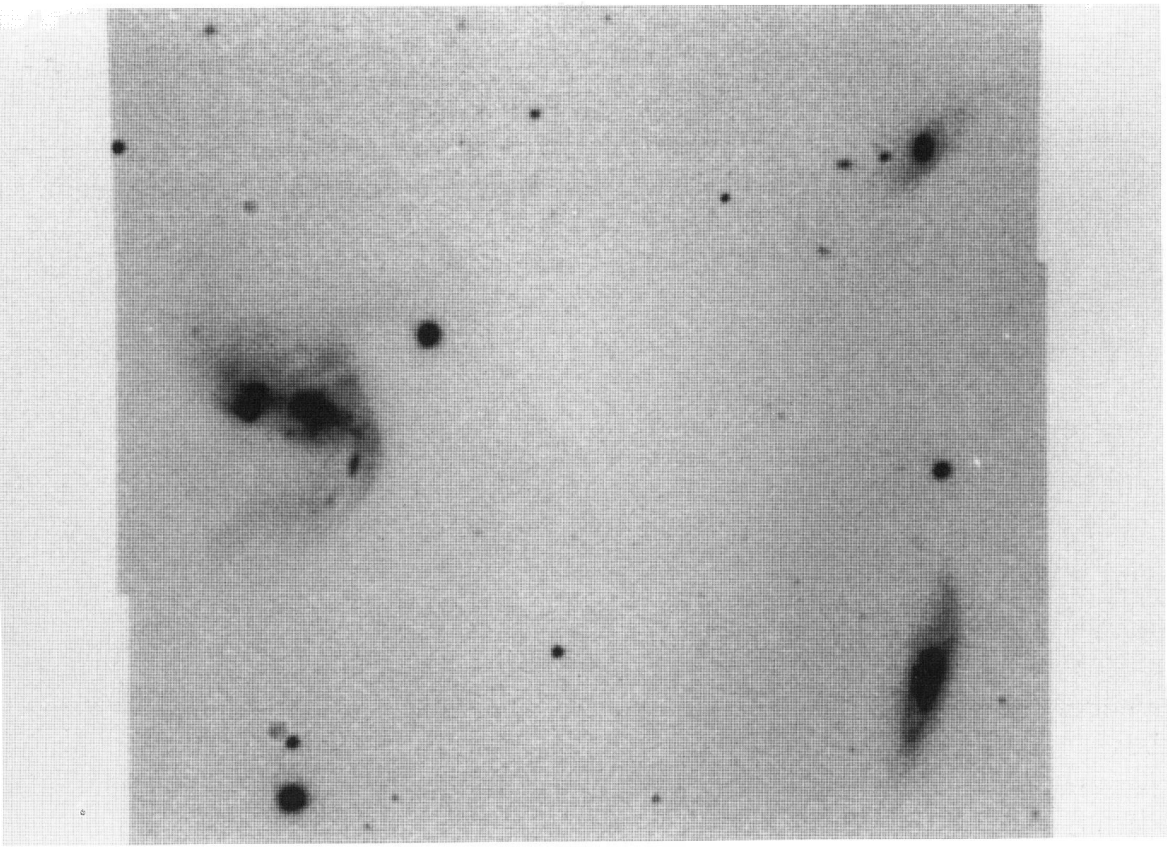
Group 38 contains the interacting pair Arp 237 with one other galaxy at a similar redshift, plus a fainter high-redshift galaxy. The triplet has a very low velocity dispersion. Galaxy b, in the interacting pair, is an infrared source.

GROUP DATA

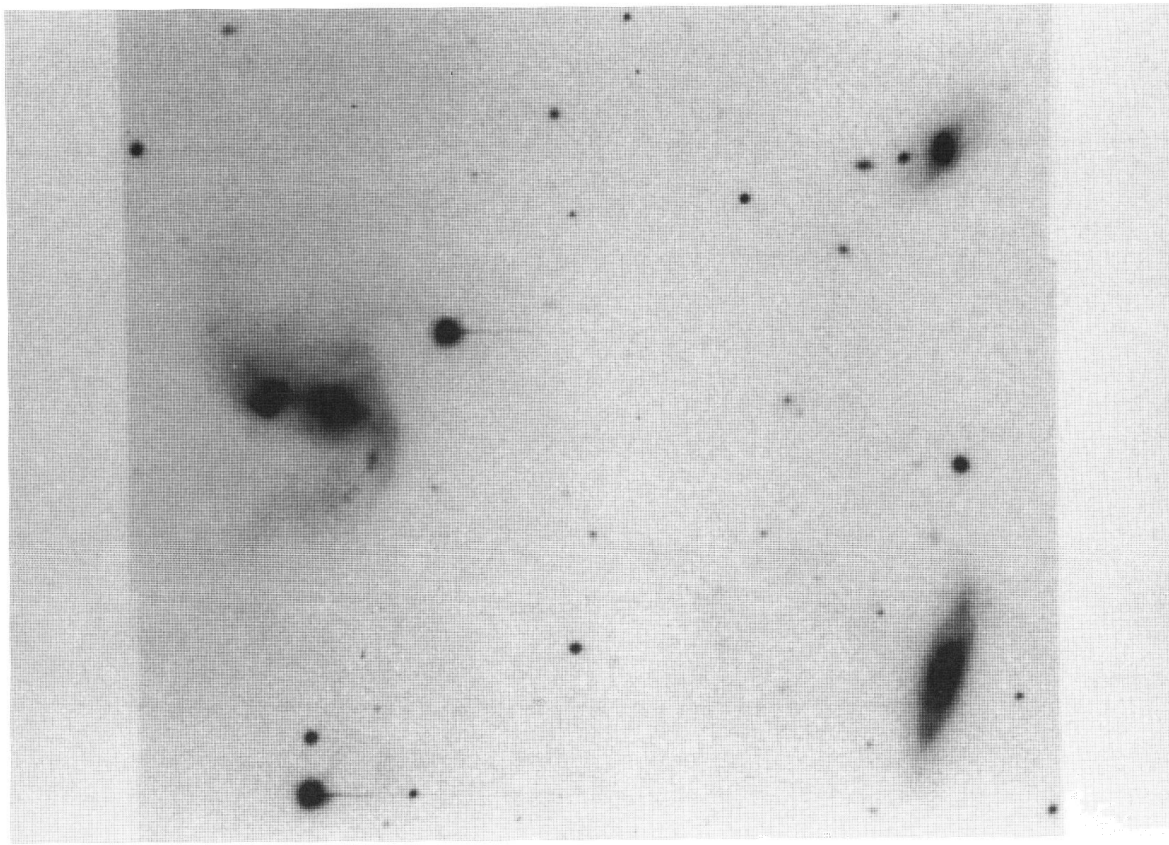
r.a. (1950)	(h m s)	09 24 56.40
dec. (1950)	(° ' ")	+12 30 16.1
galactic longitude	(°)	219.80
galactic latitude	(°)	+40.16
mean redshift		0.0292
total blue magnitude (B_{TC})		13.82
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	12.9
crossing time	(Ht_c)	7.5858
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	24 51.8	25 00.7	25 01.6	24 51.4
δ	(' ")	29 14.1	30 19.2	30 21.8	31 09.4
v	(km/s)	8760	8739	8770	24282
Δv	(km/s)	75	42	89	62
T		Sbc	SBd	Im	SBa
a	(")	22.10	30.00	21.80	13.10
b	(")	8.60	17.60	9.30	5.50
B_{TC}		15.25	14.76	15.39	16.60
$B-R$		1.55	1.39	1.52	1.69
$\log F_{60\mu}$	(Jy)		1.40		
$\log F_{100\mu}$	(Jy)		3.03		
$\log F_{20cm}$	(mJy)				
name			U5044a	U5044b	

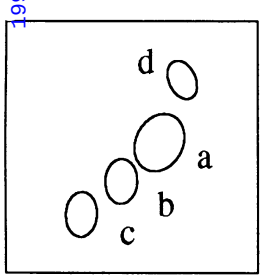


B



R

Group 39



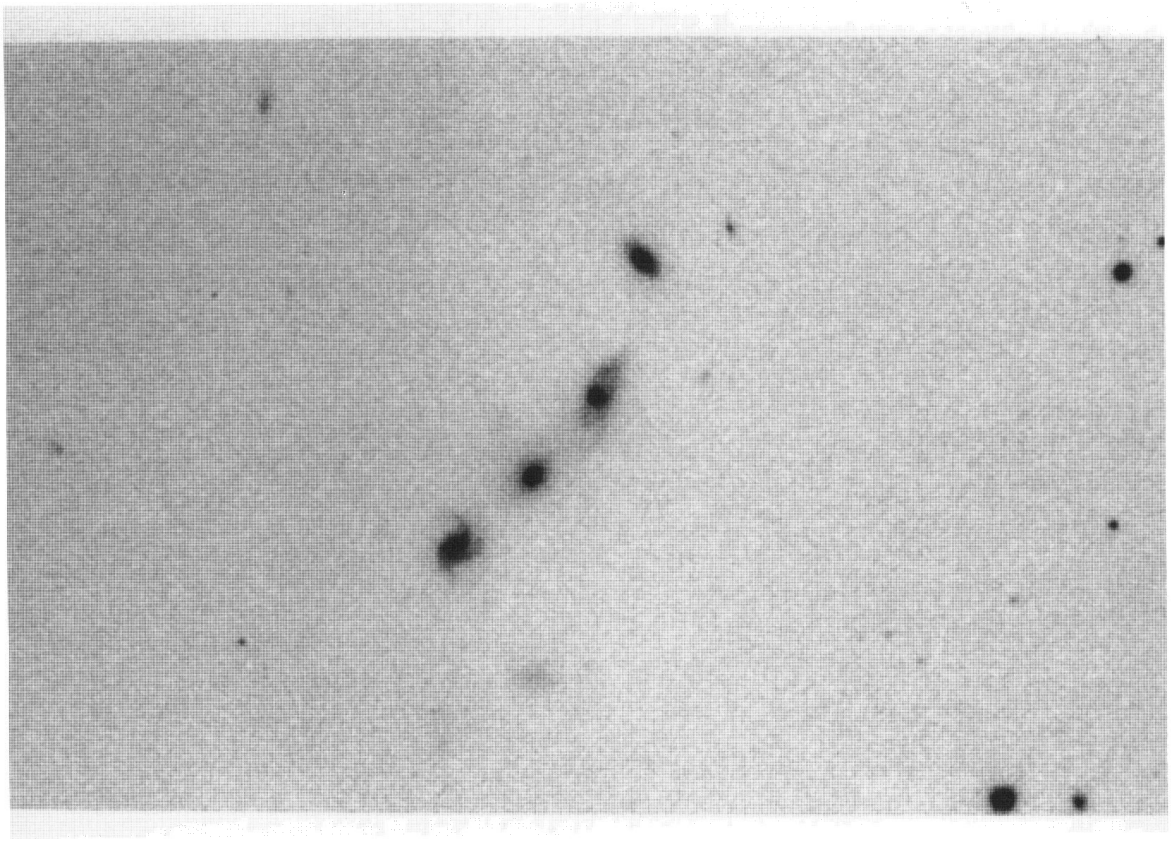
This is a small chain of four galaxies with similar redshifts. Its dynamical properties are typical of most compact groups.

GROUP DATA

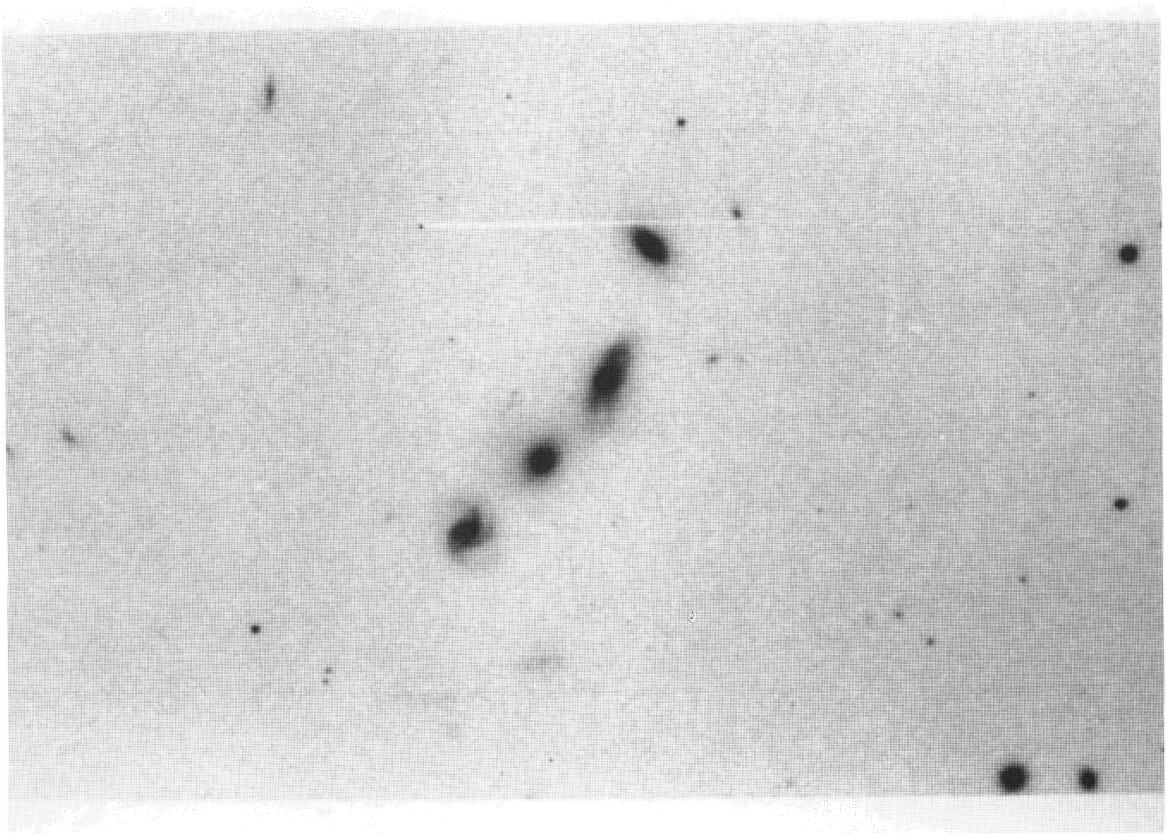
r.a. (1950)	(h m s)	09 26 55.47
dec. (1950)	(° ' ")	-01 07 38.5
galactic longitude	(°)	234.89
galactic latitude	(°)	+33.73
mean redshift		0.0701
total blue magnitude (B_{TC})		15.47
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	27.5
radial velocity dispersion	(km/s)	199.5
crossing time	(Ht_c)	0.0105
mass-to-light ratio	($M_\odot/L_\odot$)	53.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	26 54.9	26 55.8	26 56.7	26 54.4
δ	(' ")	07 34.2	07 47.8	07 59.4	07 12.4
v	(km/s)	21119	21176	20667	21048
Δv	(km/s)	52	61	35	37
T		Sb	S0	Sc	S0
a	(")	10.50	7.90	7.90	7.00
b	(")	8.20	5.60	5.50	4.70
B_{TC}		16.58	17.20	16.94	17.32
$B-R$		1.76	1.65	1.32	1.65
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

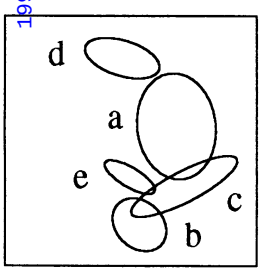


B



R

Group 40



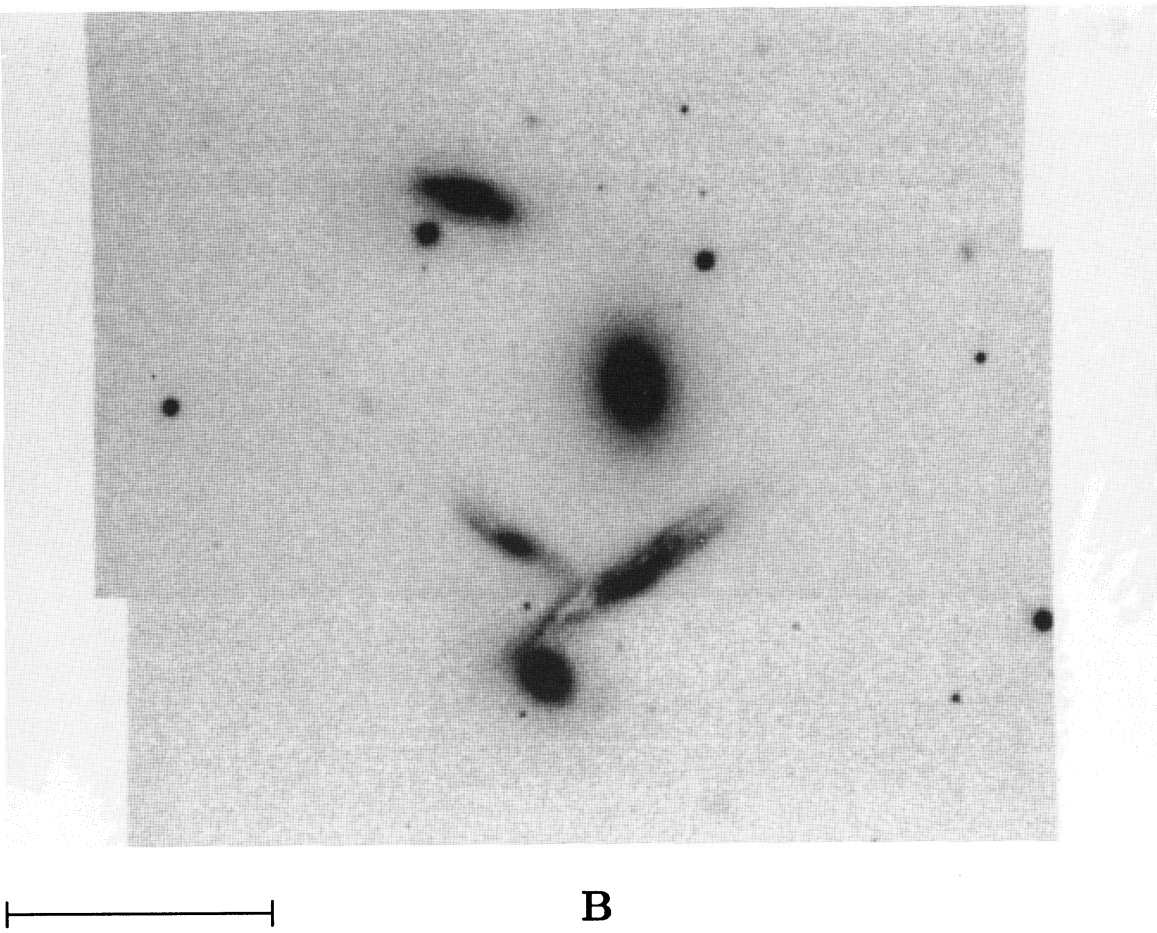
This famous and beautiful group is also known as Arp 321 and VV 116. It is a very compact quintet of overlapping galaxies. Three galaxies are radio sources; the faintest galaxy has infrared emission.

GROUP DATA

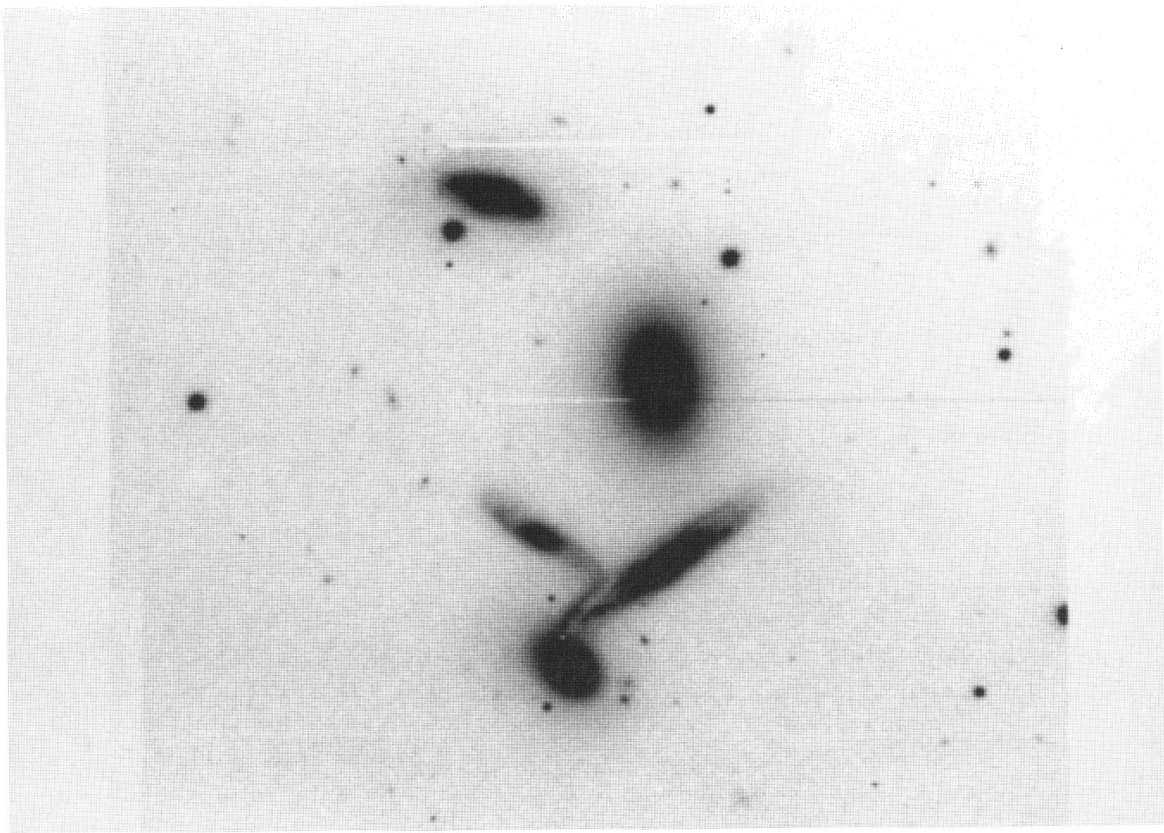
r.a. (1950)	(h m s)	09 36 24.10
dec. (1950)	(° ' ")	-04 37 39.0
galactic longitude	(°)	239.96
galactic latitude	(°)	+33.59
mean redshift		0.0223
total blue magnitude (B_{TC})		12.70
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	15.1
radial velocity dispersion	(km/s)	147.9
crossing time	(Ht_c)	0.0076
mass-to-light ratio	($M_\odot/L_\odot$)	14.5

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	36 23.0	36 24.6	36 22.7	36 25.3	36 25.0
δ	(' ")	37 21.5	38 22.8	37 58.7	36 39.4	37 52.8
v	(km/s)	6628	6842	6890	6492	6625
Δv	(km/s)	27	27	21	21	49
T		E3	S0	Sbc	SBa	Sc
a	(")	32.90	18.70	36.90	23.90	17.80
b	(")	24.30	14.60	9.60	11.00	6.20
B_{TC}		13.44	14.58	15.15	14.53	16.69
$B-R$		1.75	1.84	2.00	1.56	1.84
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					3.69
$\log F_{20cm}$	(mJy)	6.49		6.63	6.25	
name						

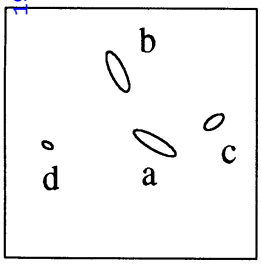


B



R

Group 41



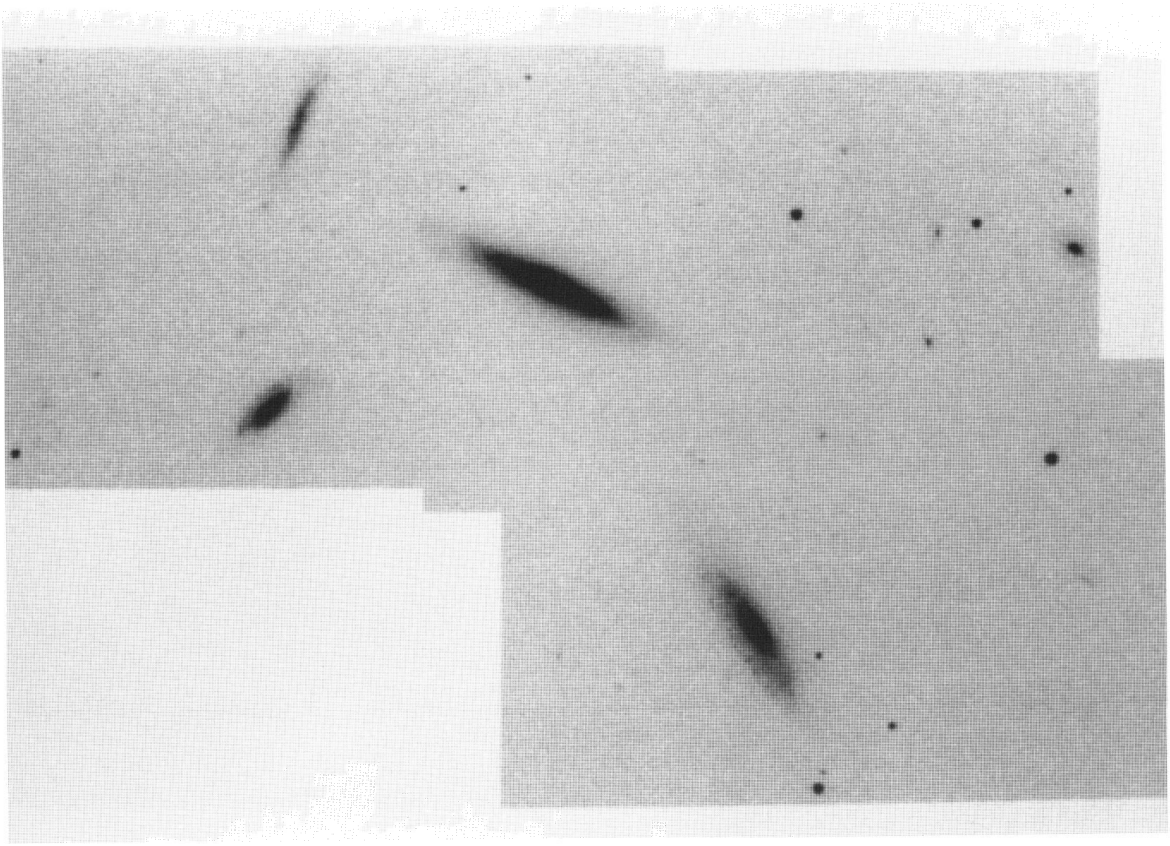
All four galaxies in this group have very different redshifts. They are presumed to be physically unrelated.

GROUP DATA

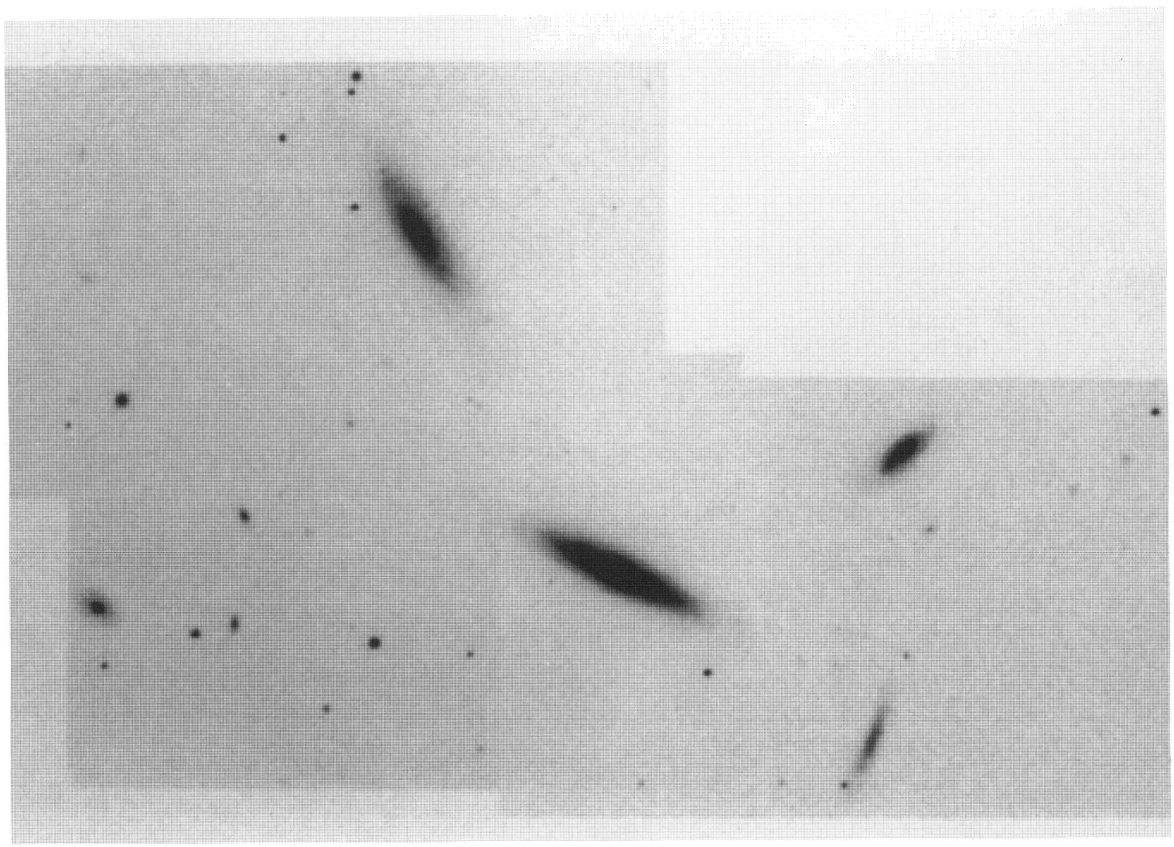
r.a. (1950)	(h m s)	09 54 30.48
dec. (1950)	(° ' ")	+45 28 38.5
galactic longitude	(°)	173.46
galactic latitude	(°)	+51.15
mean redshift		
total blue magnitude (B_{TC})		13.25
number of galaxies		4
number of accordant galaxies		0
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	54 27.5	54 32.7	54 19.2	54 42.5
δ	(' ")	28 05.3	29 50.4	28 36.9	28 01.5
v	(km/s)	3751	7241	9717	4431
Δv	(km/s)	27	24	40	67
T		Sab	Sab	Sb	S0
a	(")	35.20	32.60	16.90	8.30
b	(")	9.60	10.30	7.90	4.70
B_{TC}		13.88	14.45	15.84	17.77
$B-R$		1.49	1.38	1.28	1.71
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		U5345	U5346		

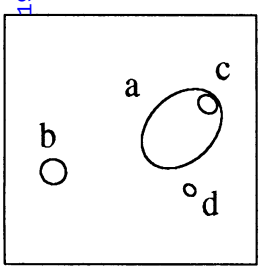


B



R

Group 42



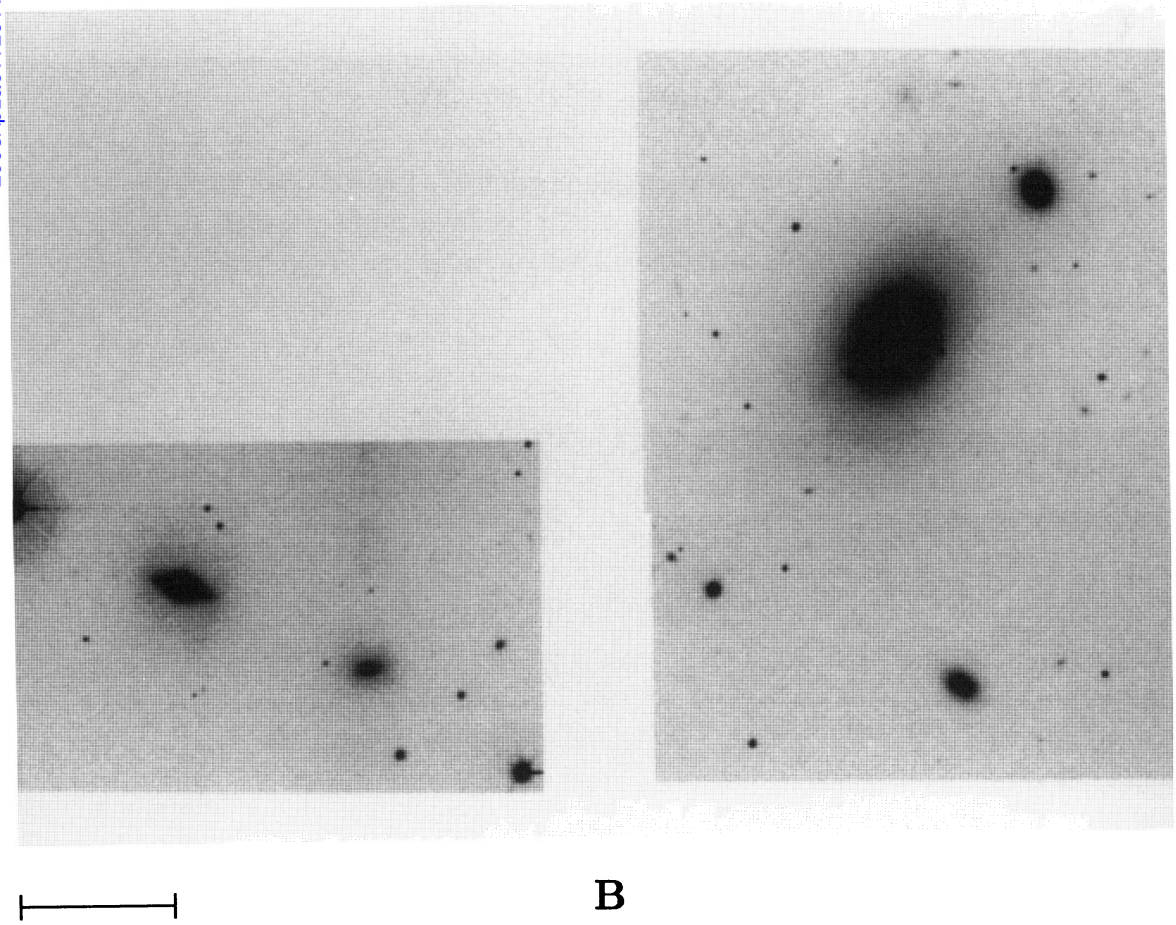
Group 42 contains the large elliptical galaxy NGC 3091 (galaxy a) and three smaller companions. Galasy a is a radio source. Galaxy c is compact and is seen within the envelope of galaxy a.

GROUP DATA

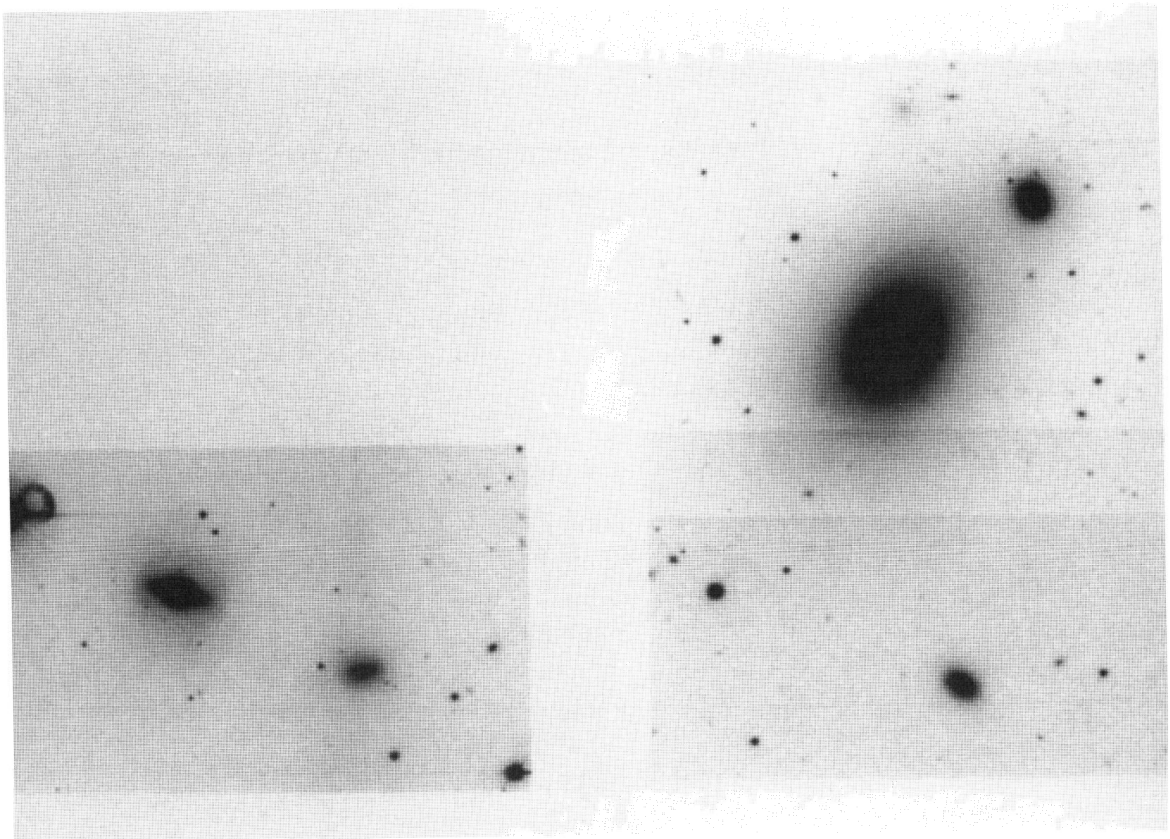
r.a. (1950)	(h m s)	09 57 55.80
dec. (1950)	(° ' ")	-19 24 28.1
galactic longitude	(°)	256.78
galactic latitude	(°)	+27.50
median redshift		0.0133
total blue magnitude (B_{TC})		11.45
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	44.7
radial velocity dispersion	(km/s)	213.8
crossing time	(Ht_c)	0.0155
mass-to-light ratio	($M_\odot/L_\odot$)	49.0

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	57 52.3	58 11.4	57 48.4	57 51.1
δ	(' ")	23 45.5	25 16.8	22 54.3	25 55.8
v	(km/s)	3625	4198	4005	4076
Δv	(km/s)	32	28	31	48
T		E3	SB0	E2	E2
a	(")	97.10	27.20	21.80	13.30
b	(")	69.20	26.30	17.90	10.70
B_{TC}		11.69	14.18	13.92	15.84
$B-R$		1.56	1.47	1.74	1.72
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	6.46			
name		N3091			

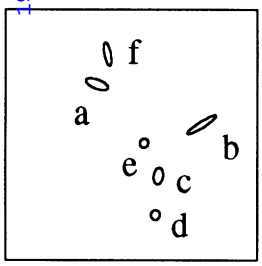


B



R

Group 43



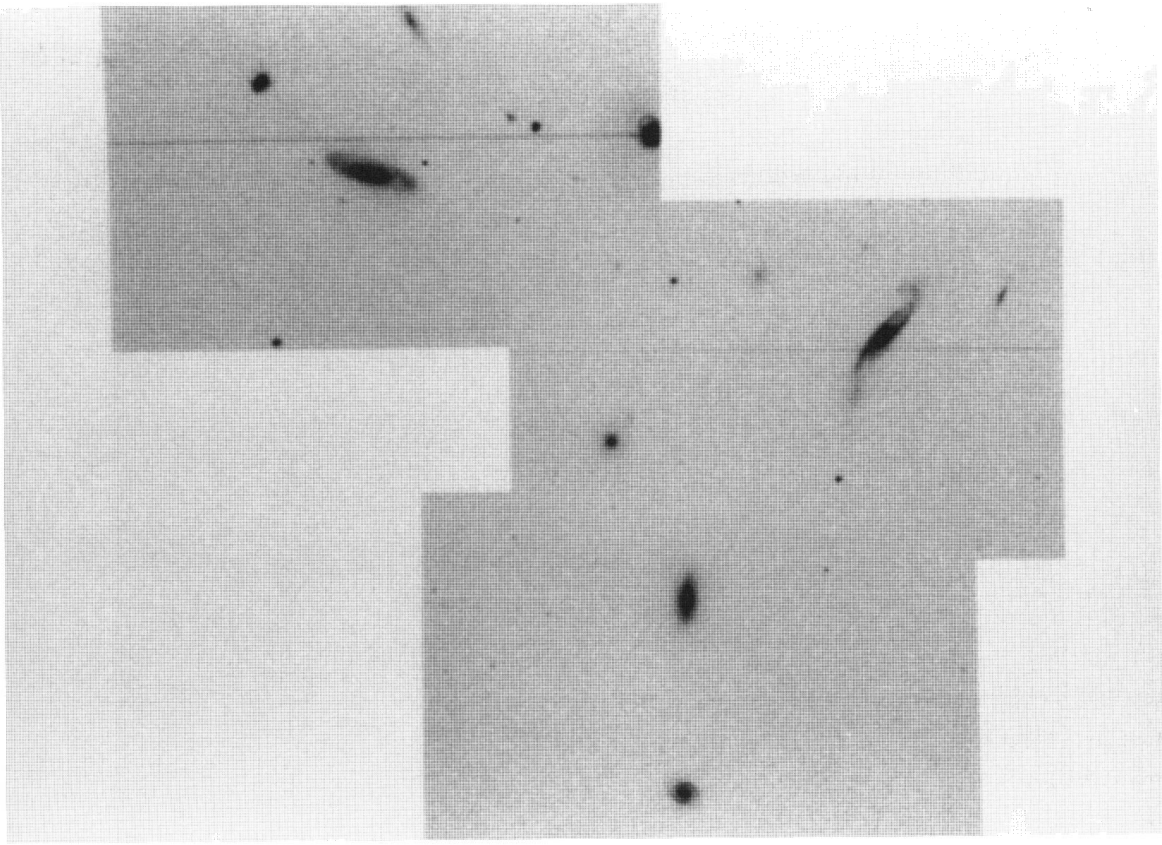
This group consists of a quintet of spiral and S0 galaxies plus a faint high-redshift galaxy. Galaxy b is distorted and galaxy d is very compact. Galaxies b and e are radio sources.

GROUP DATA

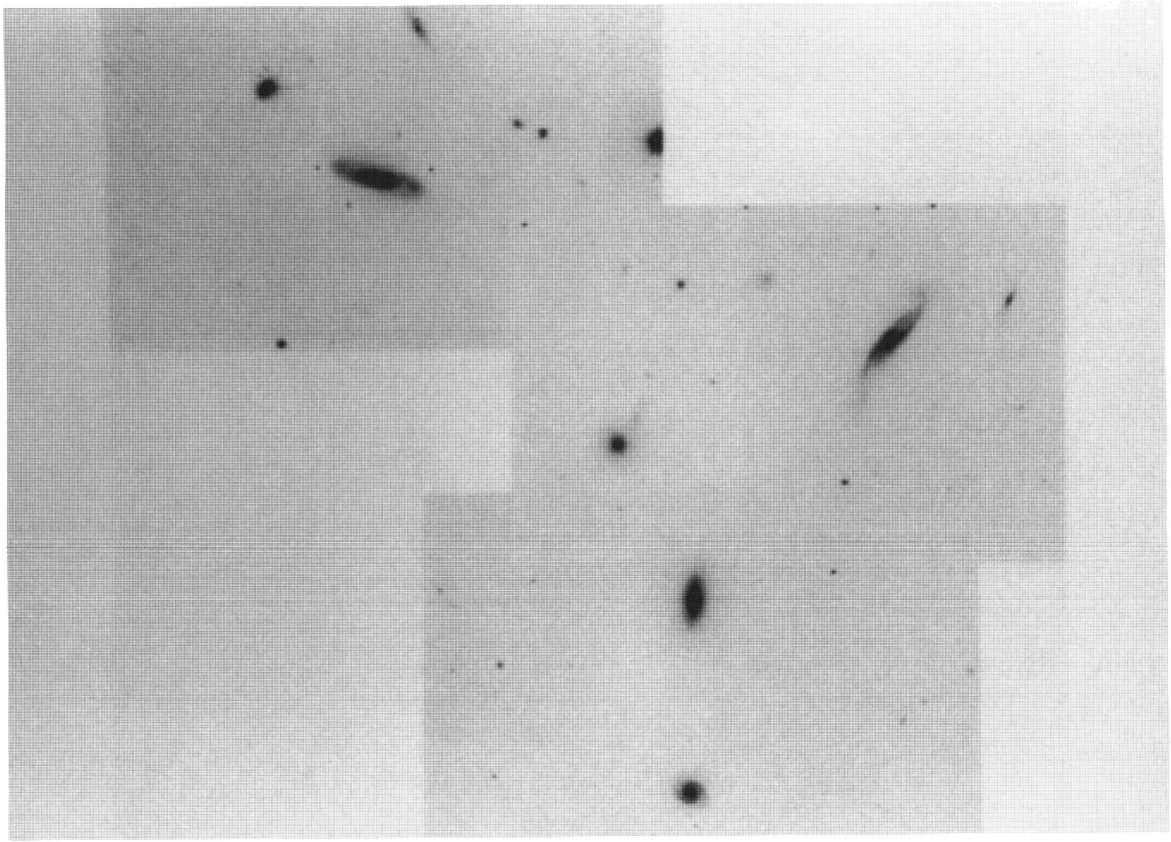
r.a. (1950)	(h m s)	10 08 40.57
dec. (1950)	(° ' ")	+00 12 00.3
galactic longitude	(°)	241.46
galactic latitude	(°)	+42.91
mean redshift		0.0330
total blue magnitude (B_{TC})		13.94
number of galaxies		6
number of accordant galaxies		5
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	223.9
crossing time	(Ht_c)	0.0200
mass-to-light ratio	($M_\odot/L_\odot$)	154.9

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	08 46.1	08 33.8	08 38.9	08 39.2	08 40.6	08 44.9
δ	(' ")	13 25.6	12 15.6	10 44.7	09 34.8	11 43.0	14 18.3
v	(km/s)	10163	10087	9916	9630	9636	19505
Δv	(km/s)	38	35	33	37	68	64
T		Sb	SBcd	SB0	Sc	S0	Sbc
a	(")	21.10	30.20	15.00	8.90	8.20	21.20
b	(")	8.10	5.50	8.30	8.00	7.40	5.90
B_{TC}		15.13	15.18	15.82	16.82	17.20	17.27
$B-R$		1.48	1.36	1.67	1.34	1.82	1.27
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)						
name			1.45		0.23		

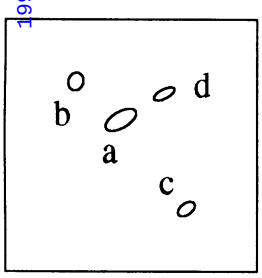


B



R

Group 44



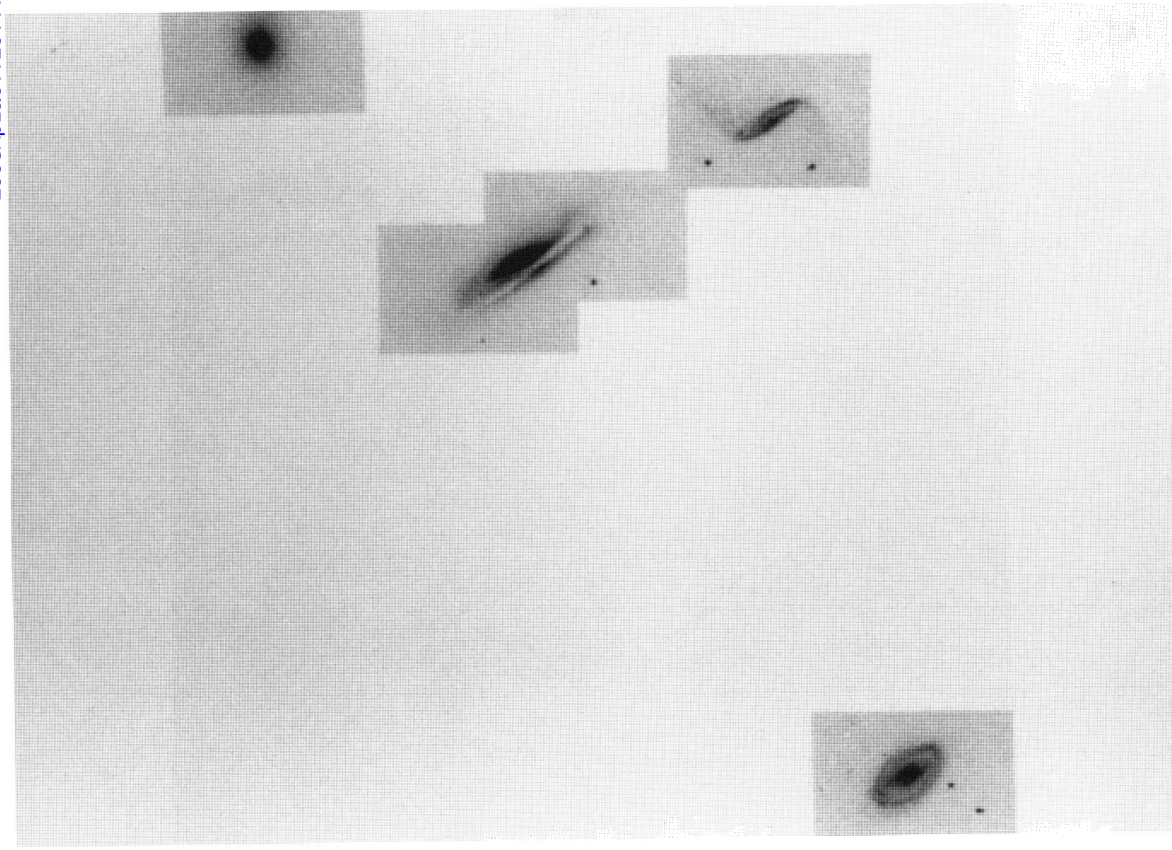
This is a well-known group of four nearby NGC galaxies (Arp 316, VV 307). All three spiral galaxies have peculiar morphologies and are radio sources.

GROUP DATA

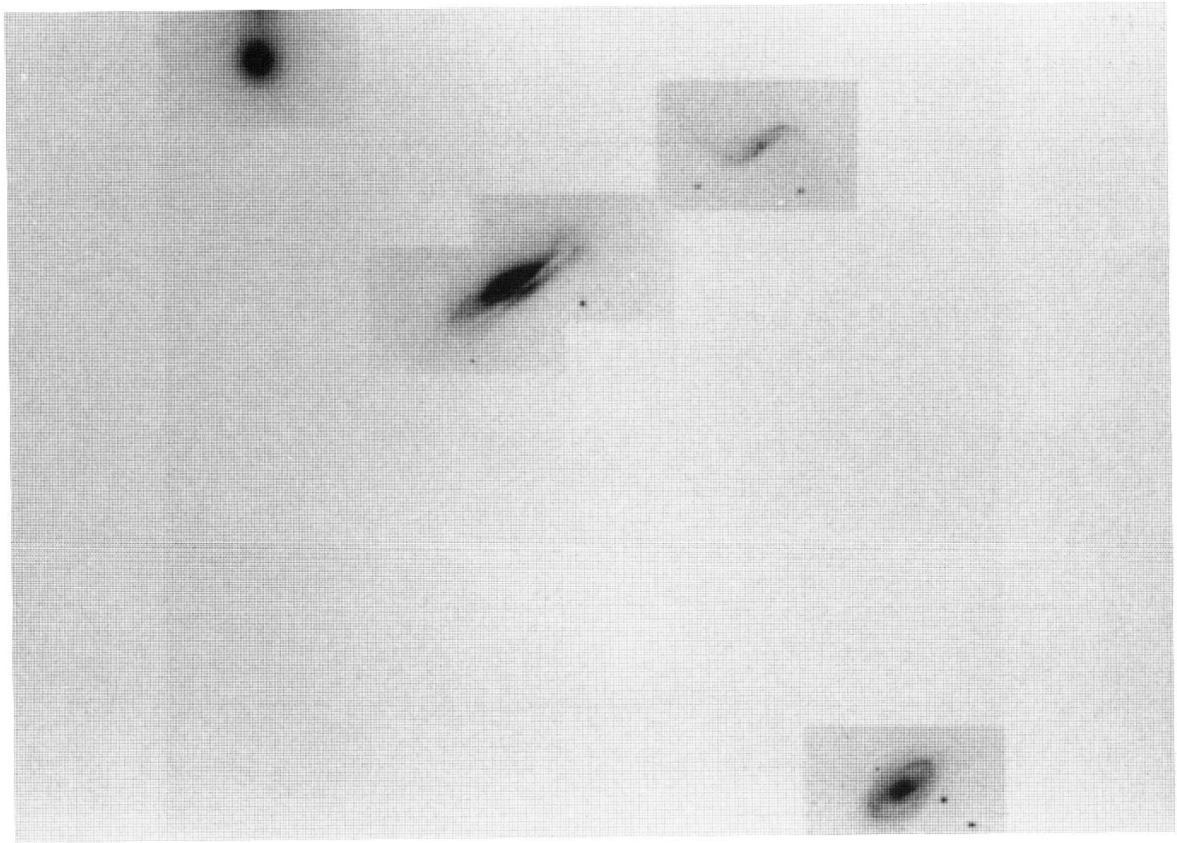
r.a. (1950)	(h m s)	10 15 13.99
dec. (1950)	(° ' ")	+22 04 19.0
galactic longitude	(°)	213.07
galactic latitude	(°)	+54.82
mean redshift		0.0046
total blue magnitude (B_{TC})		10.51
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	38.0
radial velocity dispersion	(km/s)	134.9
crossing time	(Ht_c)	0.0224
mass-to-light ratio	($M_\odot/L_\odot$)	79.4

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	15 20.6	15 39.6	14 53.3	15 02.5
δ	(' ")	04 54.9	08 36.8	56 18.8	07 25.4
v	(km/s)	1293	1378	1218	1579
Δv	(km/s)	24	19	14	91
T		Sa	E2	SBc	Sd
a	(")	100.70	53.00	56.80	67.70
b	(")	47.30	44.40	33.40	27.40
B_{TC}		11.52	11.62	12.55	13.09
$B-R$		1.28	1.69	0.97	0.26
$\log F_{60\mu}$	(Jy)	3.44		1.55	0.89
$\log F_{100\mu}$	(Jy)	9.93		3.53	2.56
$\log F_{20cm}$	(mJy)	5.71		2.54	2.95
name		N3190	N3193	N3185	N3187

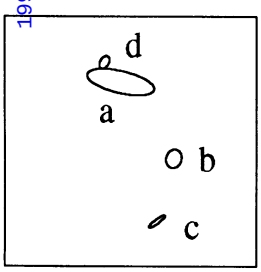


B



R

Group 45



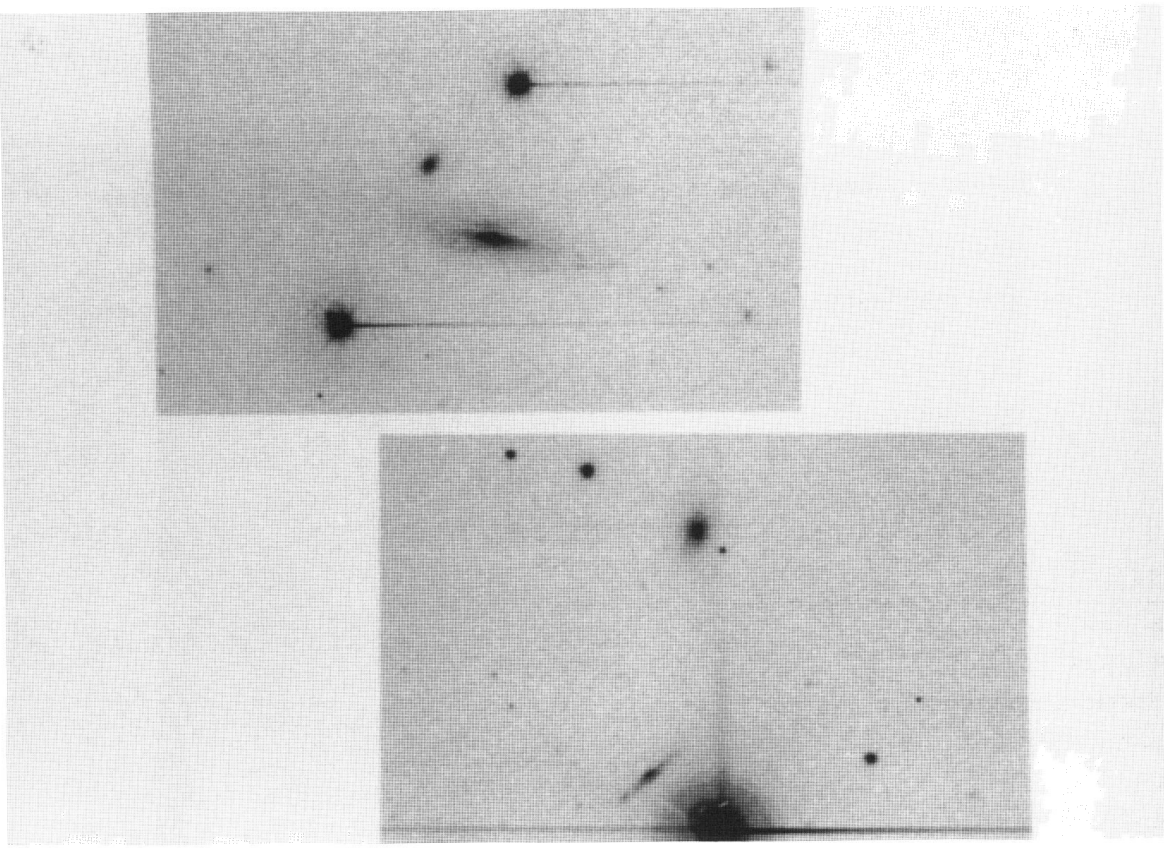
Group 45 is a distant, relatively loose, quartet of spiral and S0 galaxies. Several other galaxies of comparable magnitude appear in the neighbourhood of this group.

GROUP DATA

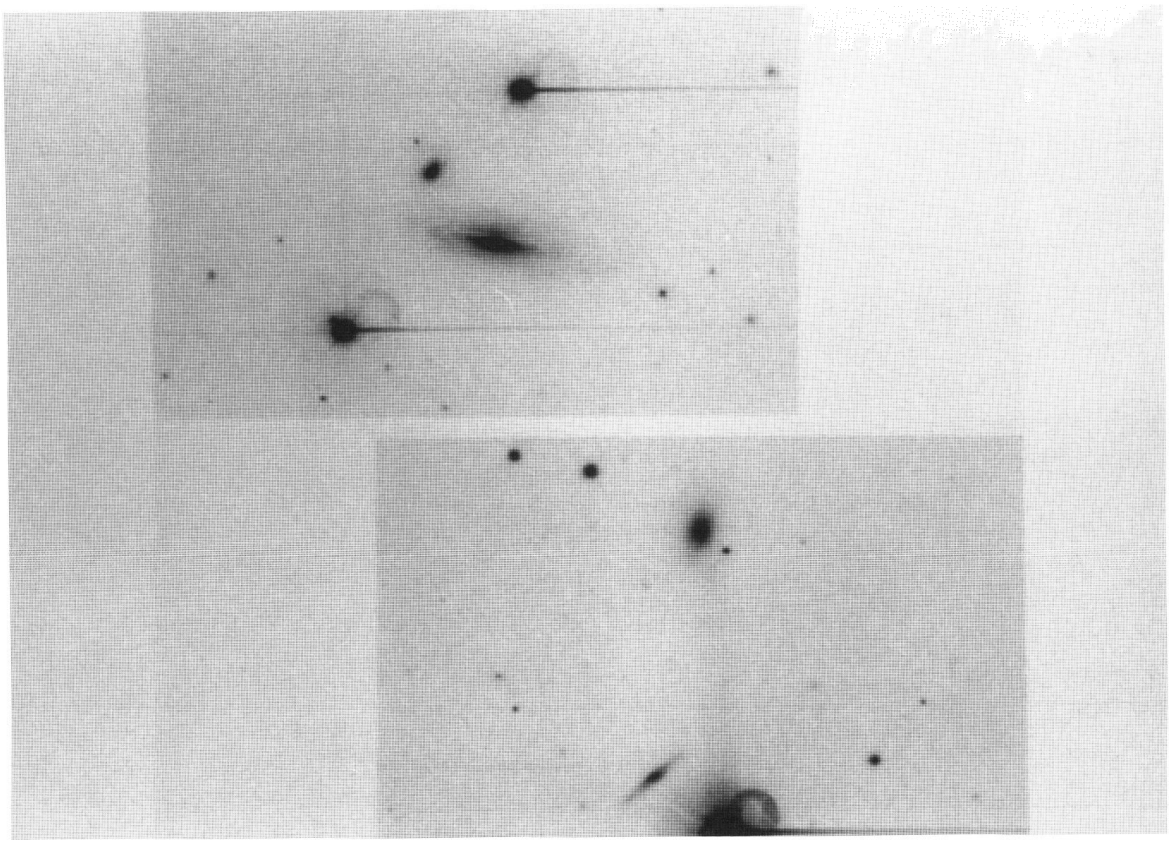
r.a. (1950)	(h m s)	10 15 48.53
dec. (1950)	(° ' ")	+59 21 55.4
galactic longitude	(°)	151.57
galactic latitude	(°)	+48.68
mean redshift		0.0732
total blue magnitude (B_{TC})		14.83
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	104.7
radial velocity dispersion	(km/s)	182.0
crossing time	(Ht_c)	0.0437
mass-to-light ratio	($M_\odot/L_\odot$)	56.2

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	15 51.4	15 43.1	15 45.7	15 54.0
δ	(' ")	22 54.4	21 22.4	20 06.5	23 18.3
v	(km/s)	21811	22195	21799	20735
Δv	(km/s)	34	29	72	43
T		Sa	S0a	Sc	S0
a	(")	41.40	11.40	12.50	8.50
b	(")	13.50	9.40	2.90	5.20
B_{TC}		15.20	17.24	17.60	17.26
$B-R$		1.57	1.59	1.40	1.63
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		U5564			

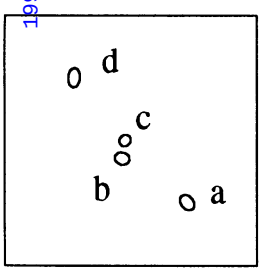


B



R

Group 46



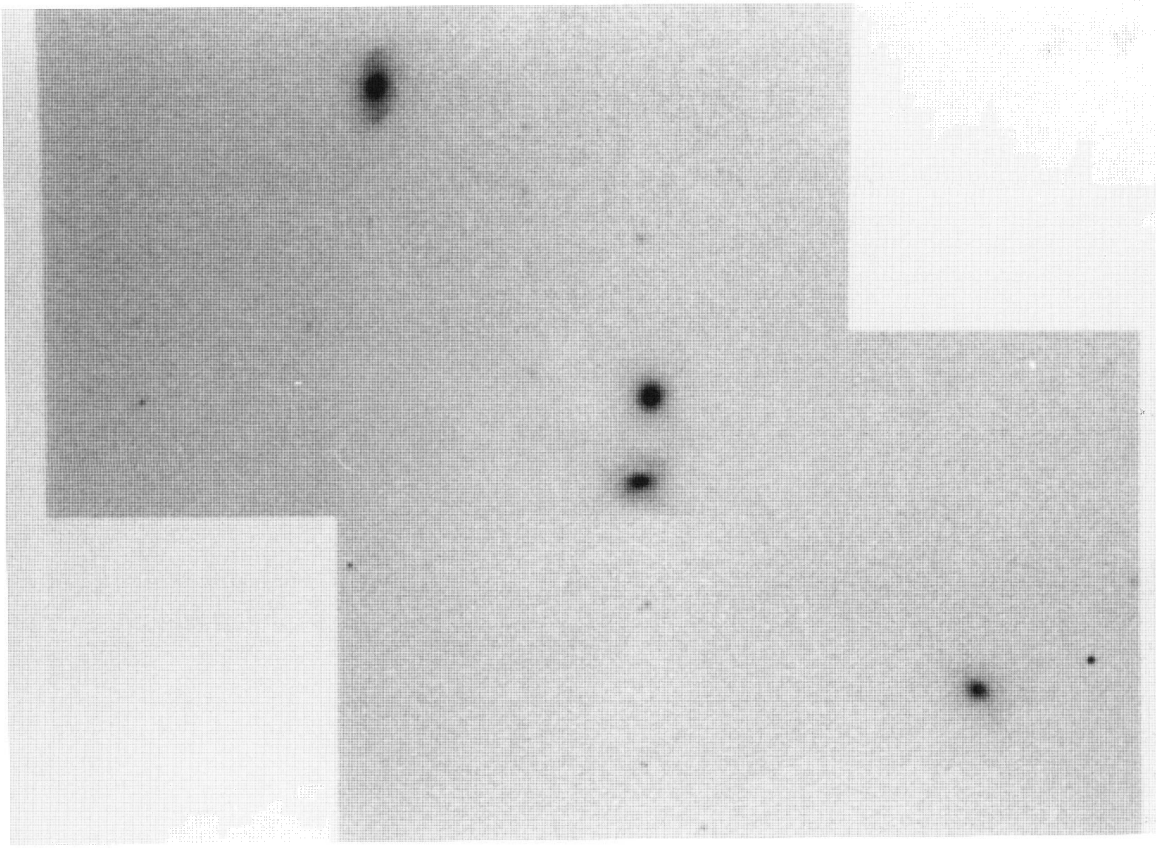
Group 46 is a quartet of early-type galaxies. Galaxies b and c appear to be in contact. The brightest galaxy is a radio source. The velocity dispersion and mass-to-light ratio of the group is relatively high. A fifth galaxy is can be found just south of the group.

GROUP DATA

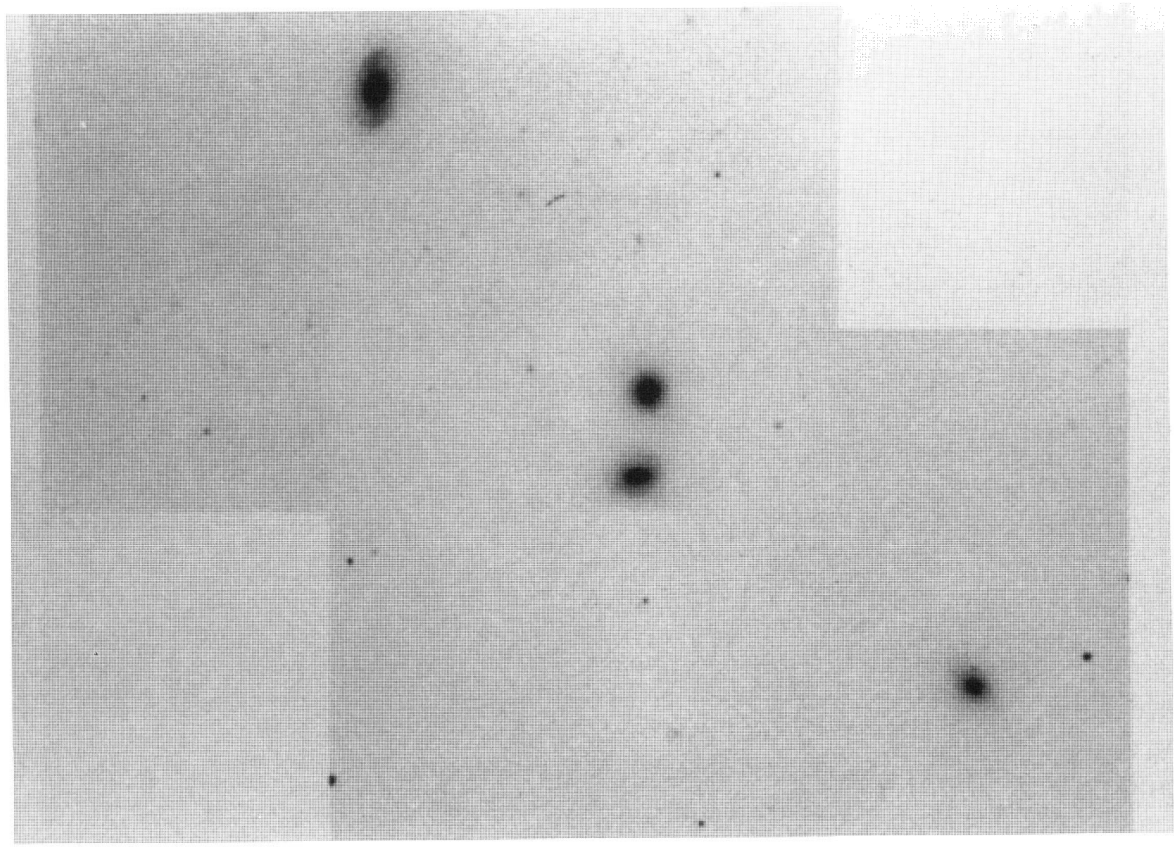
r.a. (1950)	(h m s)	10 19 29.69
dec. (1950)	(° ' ")	+18 06 39.5
galactic longitude	(°)	220.07
galactic latitude	(°)	+54.45
mean redshift		0.0270
total blue magnitude (B_{TC})		14.72
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	39.8
radial velocity dispersion	(km/s)	323.6
crossing time	(Ht_c)	0.0091
mass-to-light ratio	($M_\odot/L_\odot$)	478.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	19 24.4	19 30.1	19 29.9	19 34.4
δ	(' ")	05 26.8	06 22.0	06 44.7	08 04.6
v	(km/s)	8201	8571	7906	7703
Δv	(km/s)	35	36	42	33
T		E3	S0	E1	SB0
a	(")	10.90	9.50	7.80	12.50
b	(")	8.00	7.80	6.90	7.50
B_{TC}		16.40	16.28	16.13	16.11
$B-R$		1.34	1.40	1.39	1.68
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	5.96			
name					

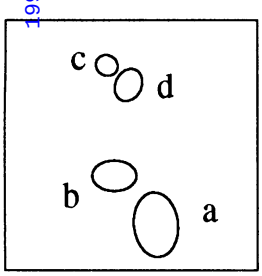


B



R

Group 47



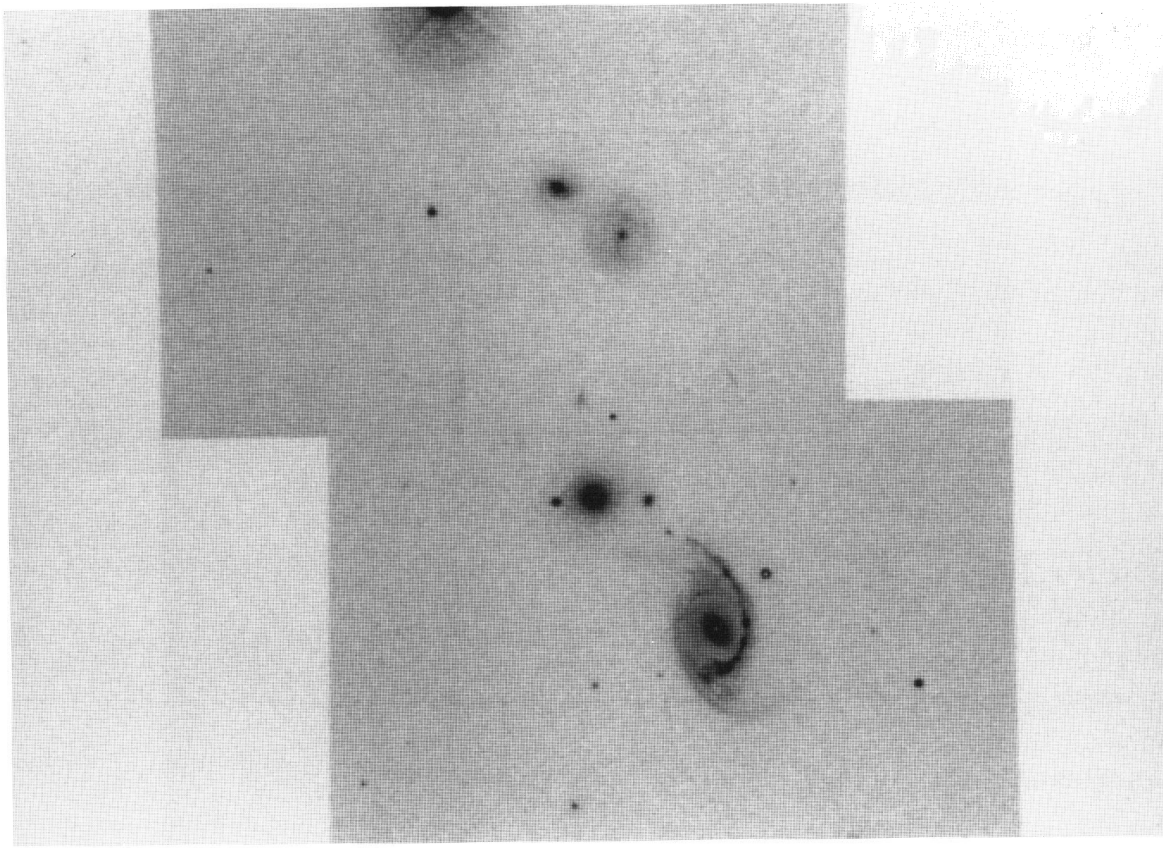
This quartet contains a peculiar elliptical galaxy (b) apparently connected by a spiral arm to the bright spiral galaxy (a). Both of these galaxies are radio sources. The elliptical galaxy has a compact nuclear source and the spiral galaxy has a ring of radio emission. The velocity dispersion and indicated mass-to-light ratio of the system are quite low.

GROUP DATA

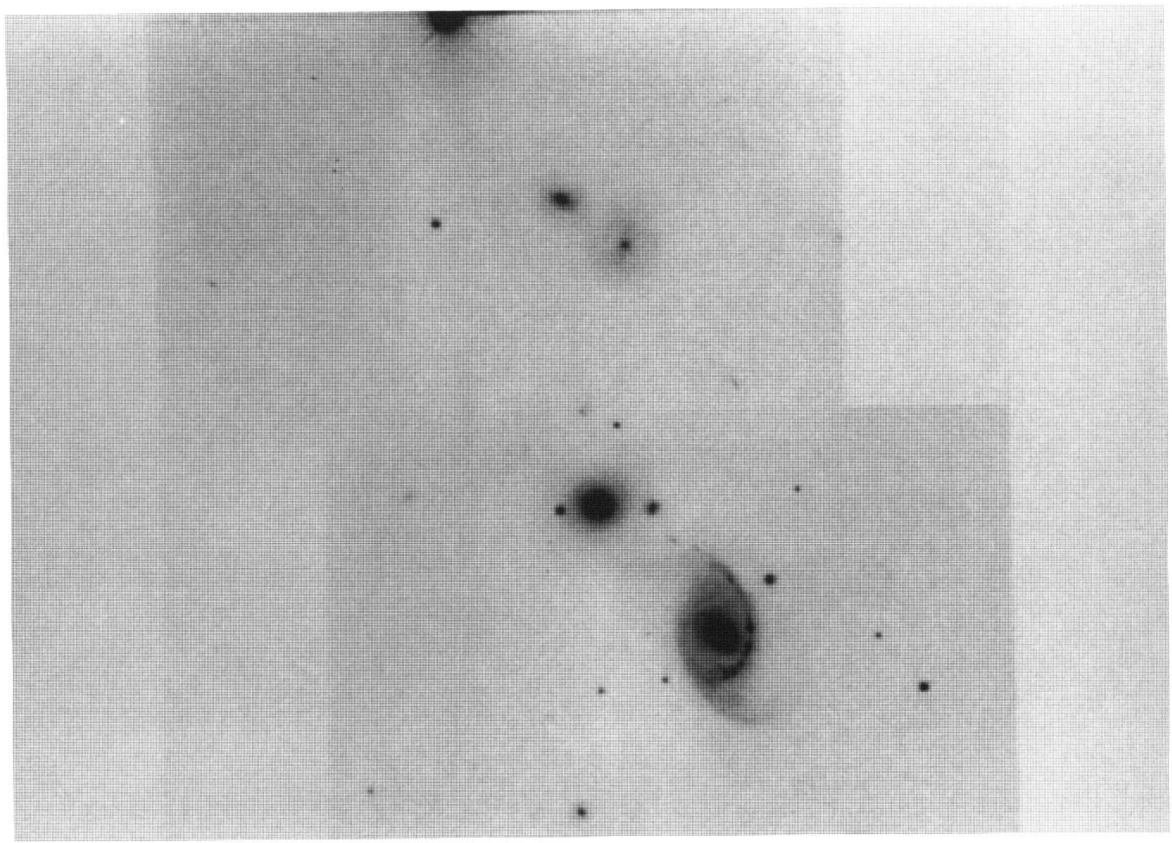
r.a. (1950)	(h m s)	10 23 07.57
dec. (1950)	(° ' ")	+13 59 28.2
galactic longitude	(°)	227.06
galactic latitude	(°)	+53.52
mean redshift		0.0317
total blue magnitude (B_{TC})		13.99
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	36.3
radial velocity dispersion	(km/s)	42.7
crossing time	(Ht_c)	4.5709
mass-to-light ratio	($M_\odot/L_\odot$)	0.9

GALAXY DATA

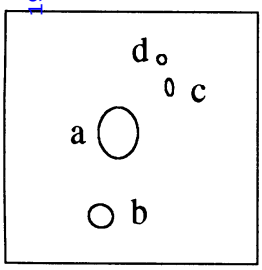
Galaxy:		a	b	c	d
α	(m s)	23 05.9	23 08.2	23 08.7	23 07.5
δ	(' ")	58 17.0	58 56.9	00 27.4	00 11.5
v	(km/s)	9581	9487	9529	9471
Δv	(km/s)	31	32	50	56
T		SBb	E3	Sc	Sd
a	(")	26.30	17.90	9.20	13.70
b	(")	17.90	12.80	8.30	10.70
B_{TC}		14.61	15.67	16.63	16.20
$B-R$		1.59	1.86	1.10	1.11
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)	1.53			
$\log F_{20cm}$	(mJy)	8.59	0.71		
name		U5644			



B



Group 48



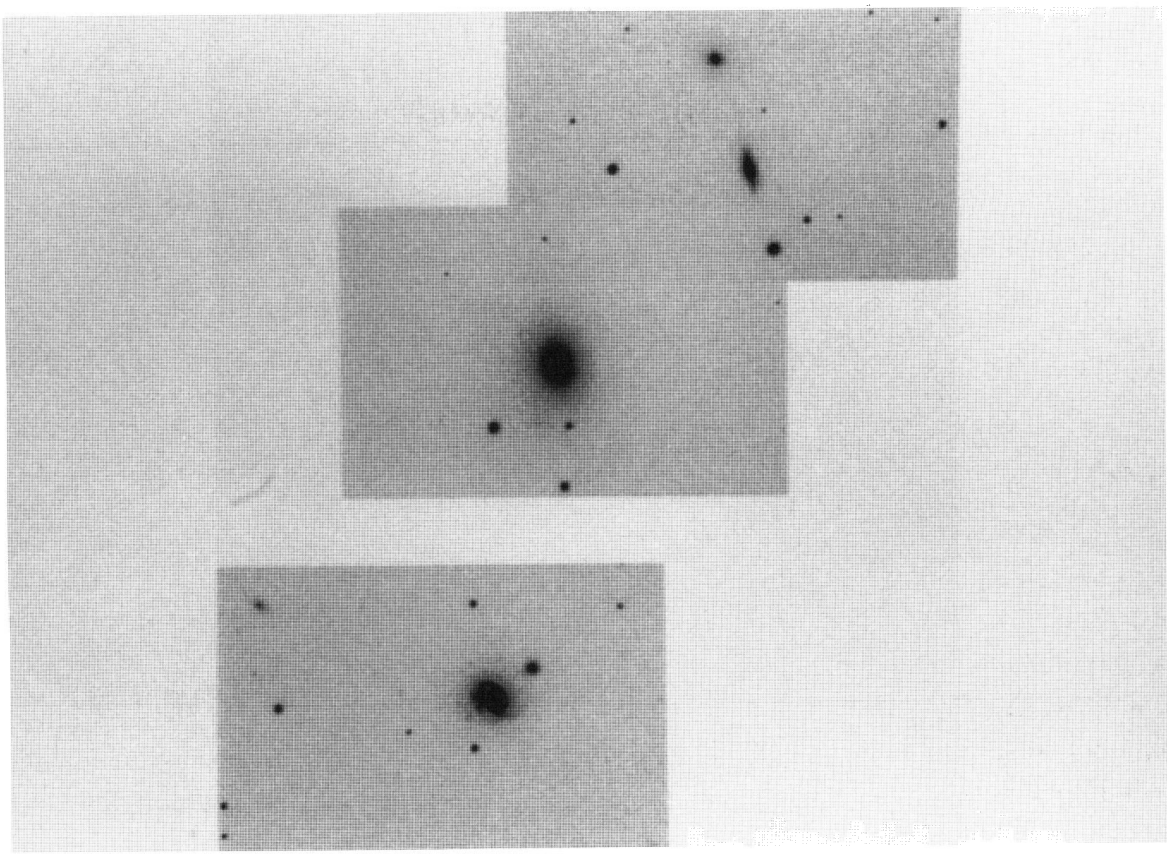
Group 48 contains the dominant elliptical galaxy IC 2597 and several companions. Galaxy c has a velocity which is 1173 km s^{-1} greater than the median so is excluded from the dynamical analysis. The velocity dispersion and mass-to-light ratio are quite high. A galaxy of comparable magnitude located nearby to the southeast may be physically and dynamically related to the group.

GROUP DATA

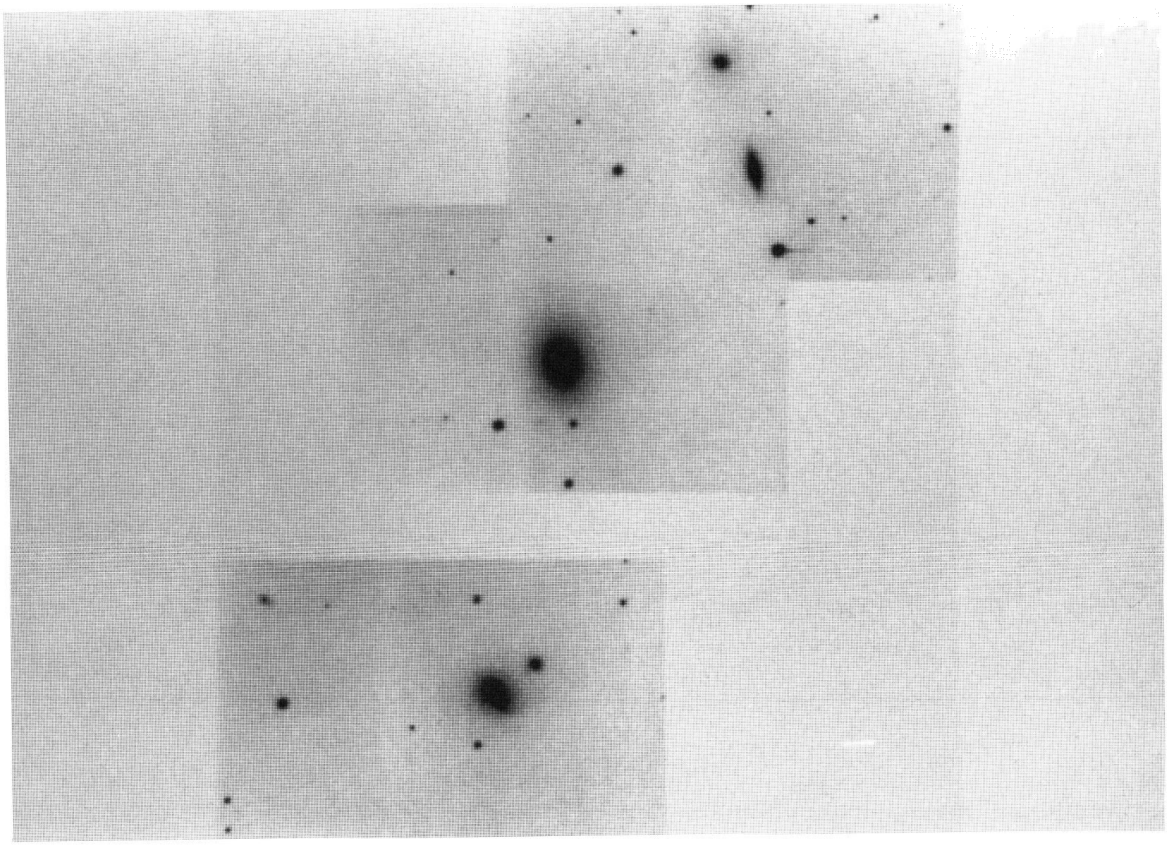
r.a. (1950)	(h m s)	10 35 23.07
dec. (1950)	(° ' ")	-26 48 57.0
galactic longitude	(°)	269.54
galactic latitude	(°)	+26.99
median redshift		0.0094
total blue magnitude (B_{TC})		12.84
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	20.4
radial velocity dispersion	(km/s)	302.0
crossing time	(Ht_c)	0.0051
mass-to-light ratio	($M_\odot/L_\odot$)	691.8

GALAXY DATA

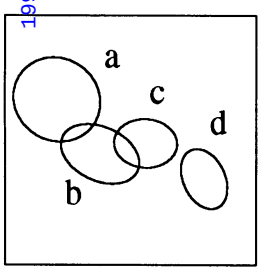
Galaxy:		a	b	c	d
α	(m s)	35 25.6	35 27.9	35 18.9	35 19.9
δ	(' ")	49 13.1	51 41.5	47 51.2	47 02.1
v	(km/s)	3014	2385	4203	3045
Δv	(km/s)	48	51	36	139
T		E2	Sc	S0a	E1
a	(")	45.70	22.00	15.40	8.80
b	(")	35.10	20.40	6.80	7.50
B_{TC}		13.21	14.63	15.82	16.70
$B-R$		1.54	0.87	1.71	1.68
$\log F_{60\mu}$	(Jy)		0.86		
$\log F_{100\mu}$	(Jy)		1.91		
$\log F_{20cm}$	(mJy)				
name		I2597			



B



Group 49



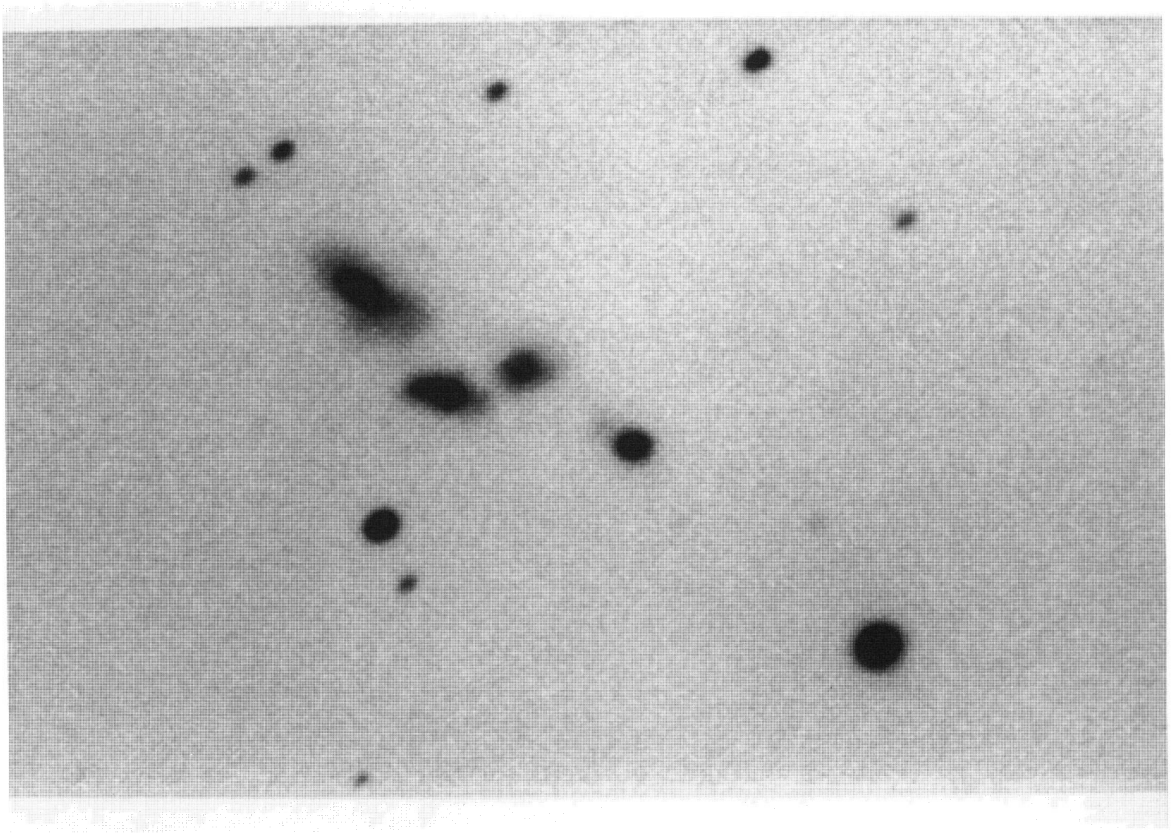
This is a small and very compact quartet with a median galaxy separation of only $12.3h^{-1}$ kpc. Its velocity dispersion is so low (lower than the uncertainties in the velocity measurements) that no estimate can be made of its mass-to-light ratio.

GROUP DATA

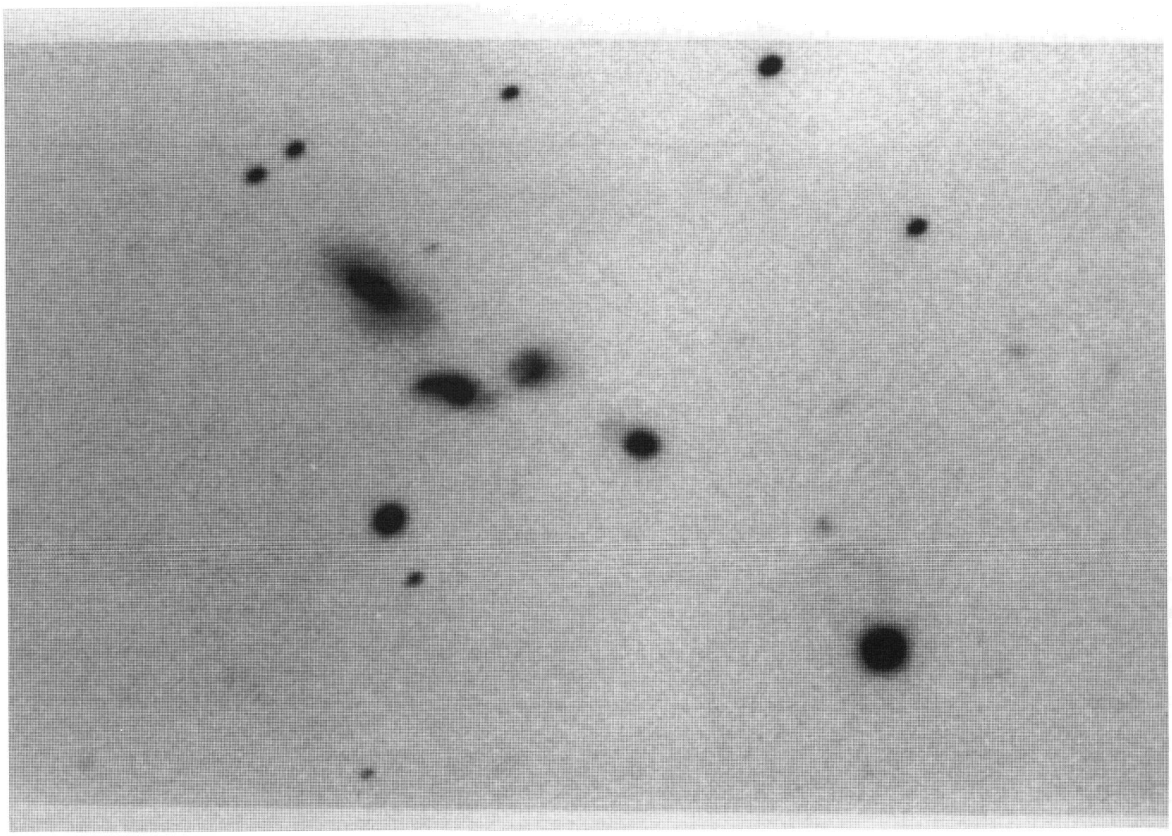
r.a. (1950)	(h m s)	10 53 19.24
dec. (1950)	(° ' ")	+67 26 54.2
galactic longitude	(°)	138.57
galactic latitude	(°)	+46.31
mean redshift		0.0332
total blue magnitude (B_{TC})		14.95
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	12.3
radial velocity dispersion	(km/s)	33.9
crossing time	(Ht_c)	1.5488
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

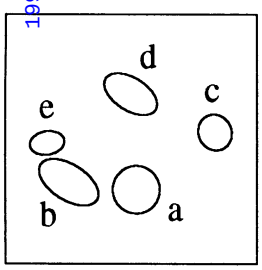
Galaxy:		a	b	c	d
α	(m s)	53 23.1	53 20.7	53 18.2	53 14.95
δ	(' ")	27 08.5	26 50.9	26 54.3	26 42.9
v	(km/s)	9939	9930	9926	10010
Δv	(km/s)	36	51	60	72
T		Scd	Sd	Im	E5
a	(")	14.30	13.20	10.10	10.20
b	(")	13.30	8.70	7.90	6.70
B_{TC}		15.87	16.30	17.18	16.99
$B-R$		1.04	0.90	1.06	0.97
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 50



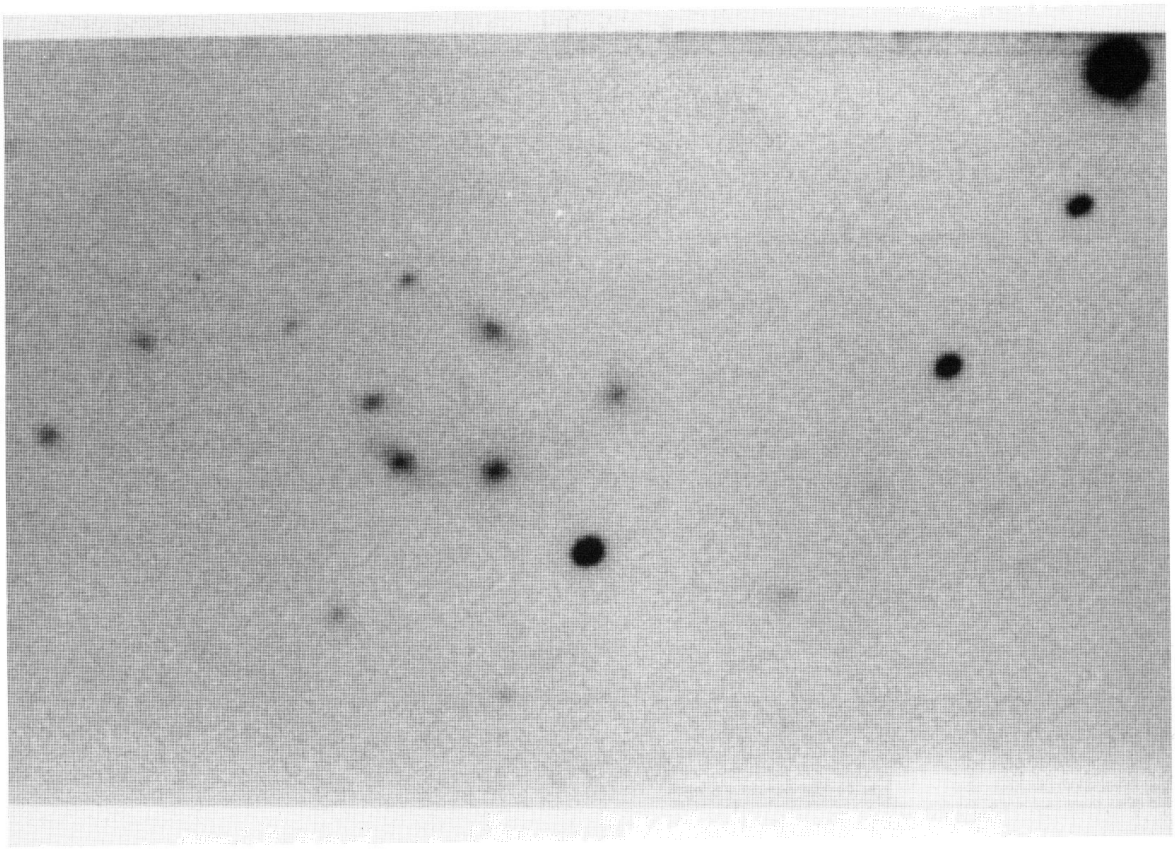
Group 50 has the highest redshift of any group in the catalogue. It is a small quintet of early-type galaxies with a very high velocity dispersion.

GROUP DATA

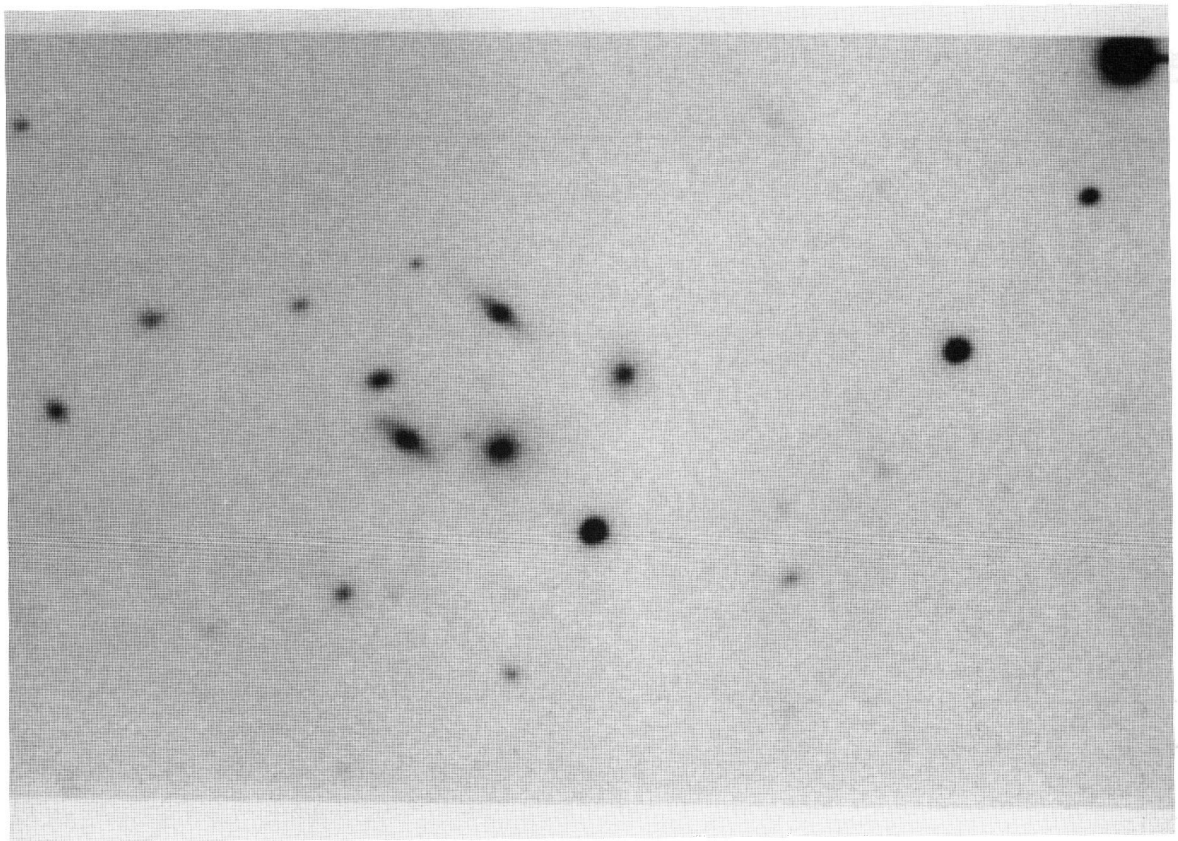
r.a. (1950)	(h m s)	11 14 14.85
dec. (1950)	(° ' ")	+55 11 33.4
galactic longitude	(°)	148.15
galactic latitude	(°)	+57.35
mean redshift		0.1392
total blue magnitude (B_{TC})		17.16
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	38.9
radial velocity dispersion	(km/s)	467.7
crossing time	(Ht_c)	0.0062
mass-to-light ratio	($M_\odot/L_\odot$)	234.4

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	14 14.4	14 16.3	14 12.1	14 14.5	14 16.9
δ	(' ")	11 23.2	11 25.0	11 37.3	11 46.8	11 34.6
v	(km/s)	41870	41170	41398	42546	41650
Δv	(km/s)	118	111	62	62	62
T		E0	SB0	S0	S0	S0
a	(")	5.90	8.20	4.50	7.30	4.30
b	(")	5.80	4.40	4.10	4.10	2.90
B_{TC}		18.40	18.50	19.30	19.20	19.70
$B-R$		2.17	2.14	2.14	2.25	2.13
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{6cm}$	(mJy)					
$\log F_{20cm}$	(mJy)					
name						

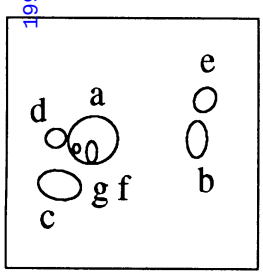


B



R

Group 51



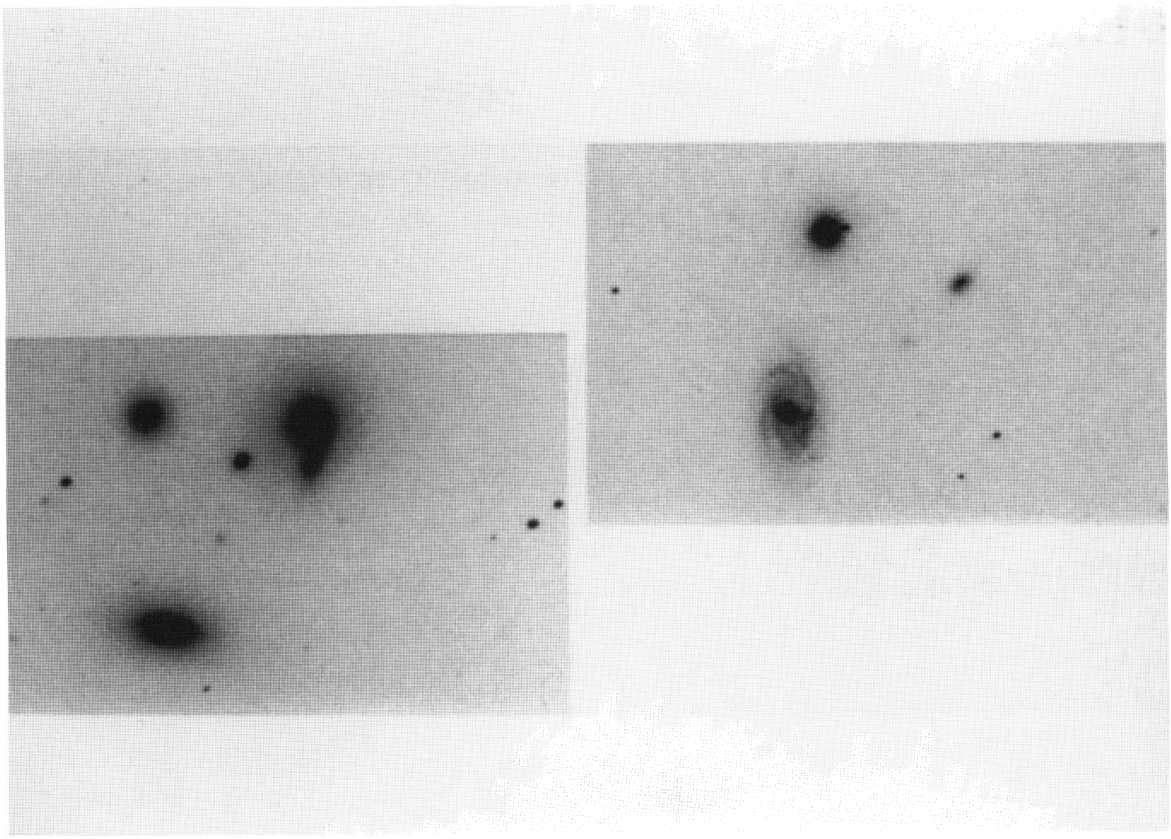
This group consists of a quintet plus two small companions to galaxy (a). A redshift is available for the brightest of the two companions and it is accordant. The bright S0 galaxy (c) has a nuclear radio source.

GROUP DATA

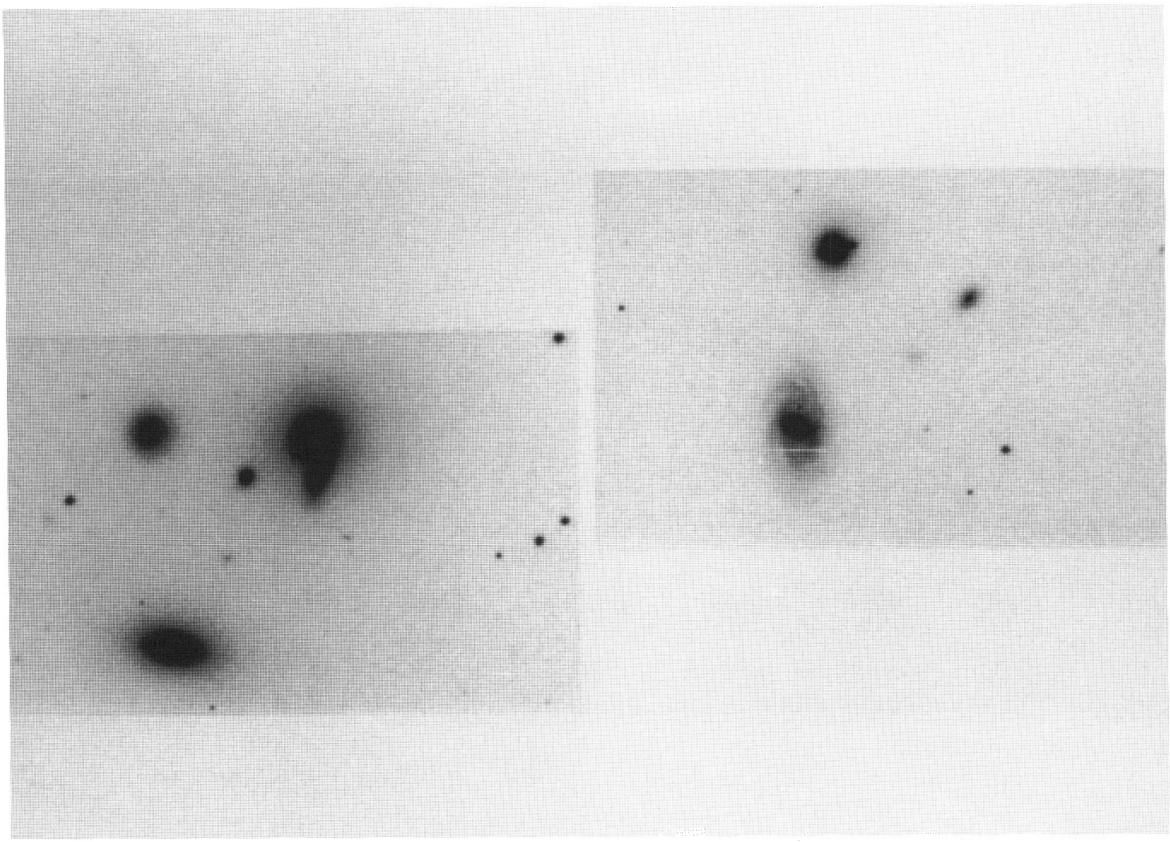
r.a. (1950)	(h m s)	11 19 45.45
dec. (1950)	(° ' ")	+24 34 18.2
galactic longitude	(°)	215.99
galactic latitude	(°)	+69.77
mean redshift		0.0258
total blue magnitude (B_{TC})		12.56
number of galaxies		7
number of accordant galaxies		5
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	239.9
crossing time	(Ht_c)	0.0186
mass-to-light ratio	($M_\odot/L_\odot$)	72.4

GALAXY DATA

Galaxy:		a	b	c	d	e	f	g
α	(m s)	19 47.6	19 35.5	19 51.4	19 51.9	19 34.6	19 47.7	19 49.5
δ	(' ")	34 23.1	34 25.1	33 12.2	34 25.8	35 27.4	34 04.4	34 09.6
v	(km/s)	7696	8183	8902	7529	7700	7532	
Δv	(km/s)	34	62	20	35	23	30	
T		E1	SBbc	S0	Sa	E2	S0	cI
a	(")	40.00	28.80	34.40	16.40	20.30	17.00	7.00
b	(")	37.00	16.10	22.90	14.90	16.50	8.50	5.70
B_{TC}		13.89	15.28	14.17	15.18	14.81	14.79	15.73
$B-R$		1.68	1.51	1.67	1.47	1.55	1.56	1.27
$\log F_{60\mu}$	(Jy)							
$\log F_{100\mu}$	(Jy)							
$\log F_{20cm}$	(mJy)			18.40				
name								

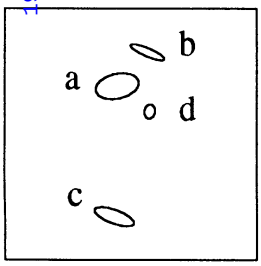


B



R

Group 52



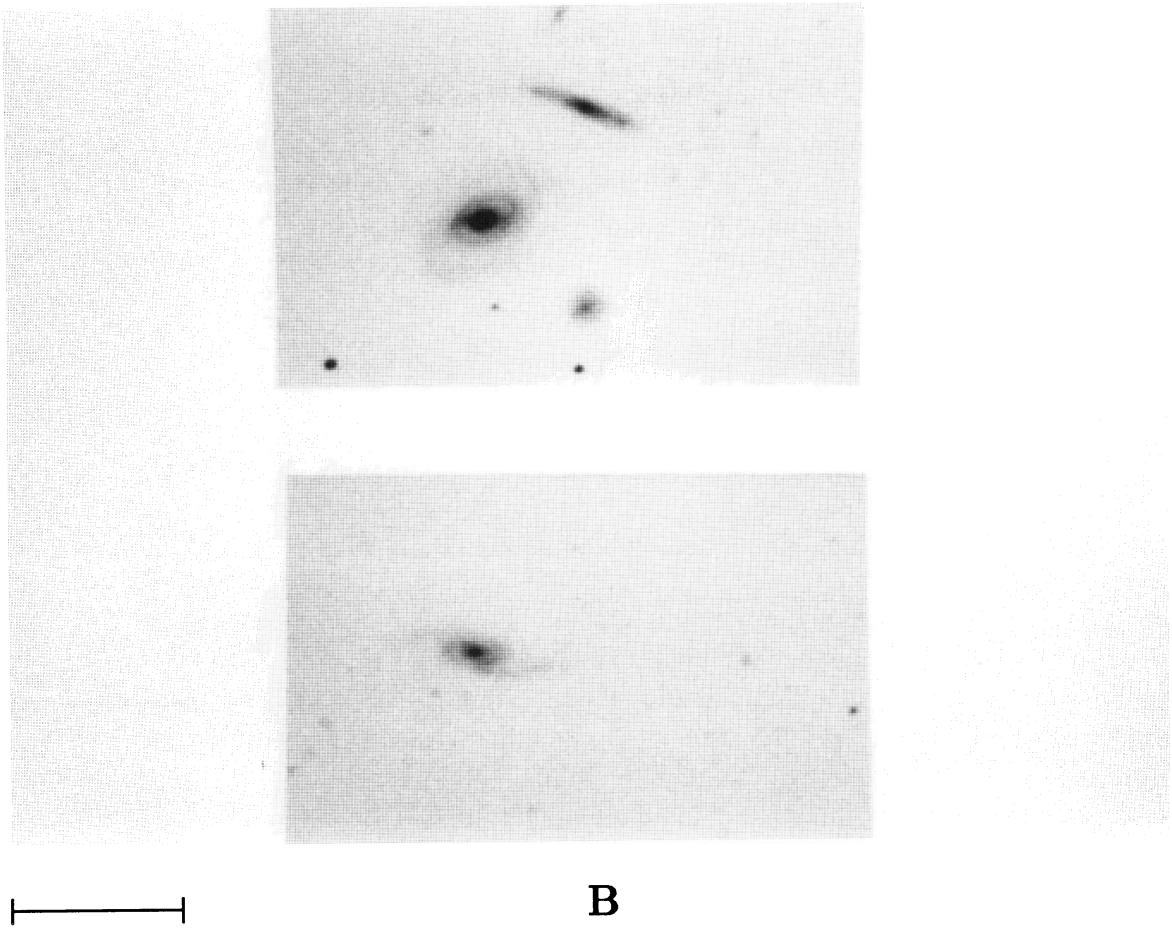
Group 52 is a fairly loose triplet of spiral galaxies plus a fainter late-type spiral galaxy (d) which has a lower redshift.

GROUP DATA

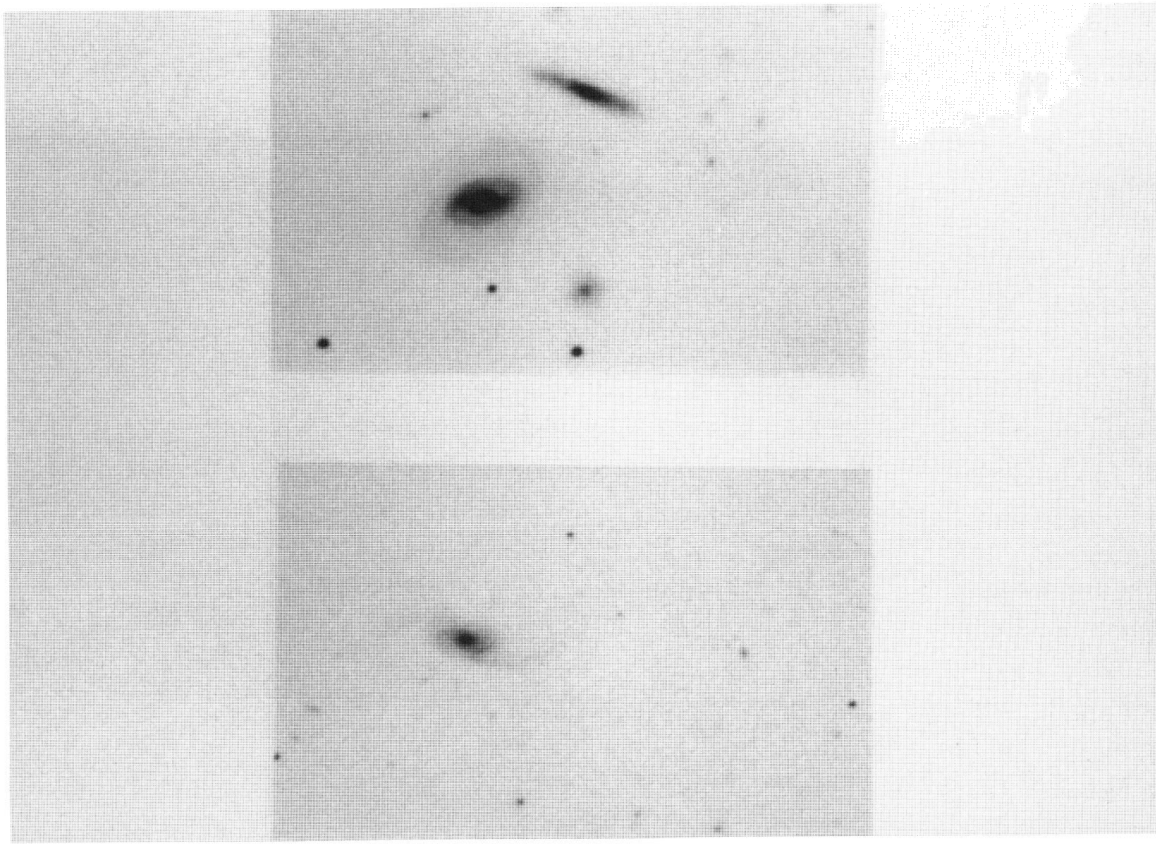
r.a. (1950)	(h m s)	11 23 40.11
dec. (1950)	(° ' ")	+21 21 41.5
galactic longitude	(°)	225.62
galactic latitude	(°)	+69.69
mean redshift		0.0430
total blue magnitude (B_{TC})		14.06
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	87.1
radial velocity dispersion	(km/s)	182.0
crossing time	(Ht_c)	0.0372
mass-to-light ratio	($M_\odot/L_\odot$)	109.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	23 41.3	23 38.9	23 41.6	23 38.7
δ	(' ")	22 16.2	22 54.9	19 47.4	21 47.3
v	(km/s)	12979	13040	12630	6293
Δv	(km/s)	38	73	61	65
T		SBab	Sc	Scd	Sdm
a	(")	24.90	21.00	23.80	8.20
b	(")	14.30	4.70	7.90	6.10
B_{TC}		14.90	15.66	15.69	16.76
$B-R$		1.57	1.53	1.17	0.97
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

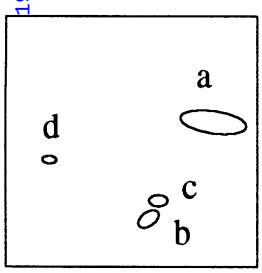


B



R

Group 53



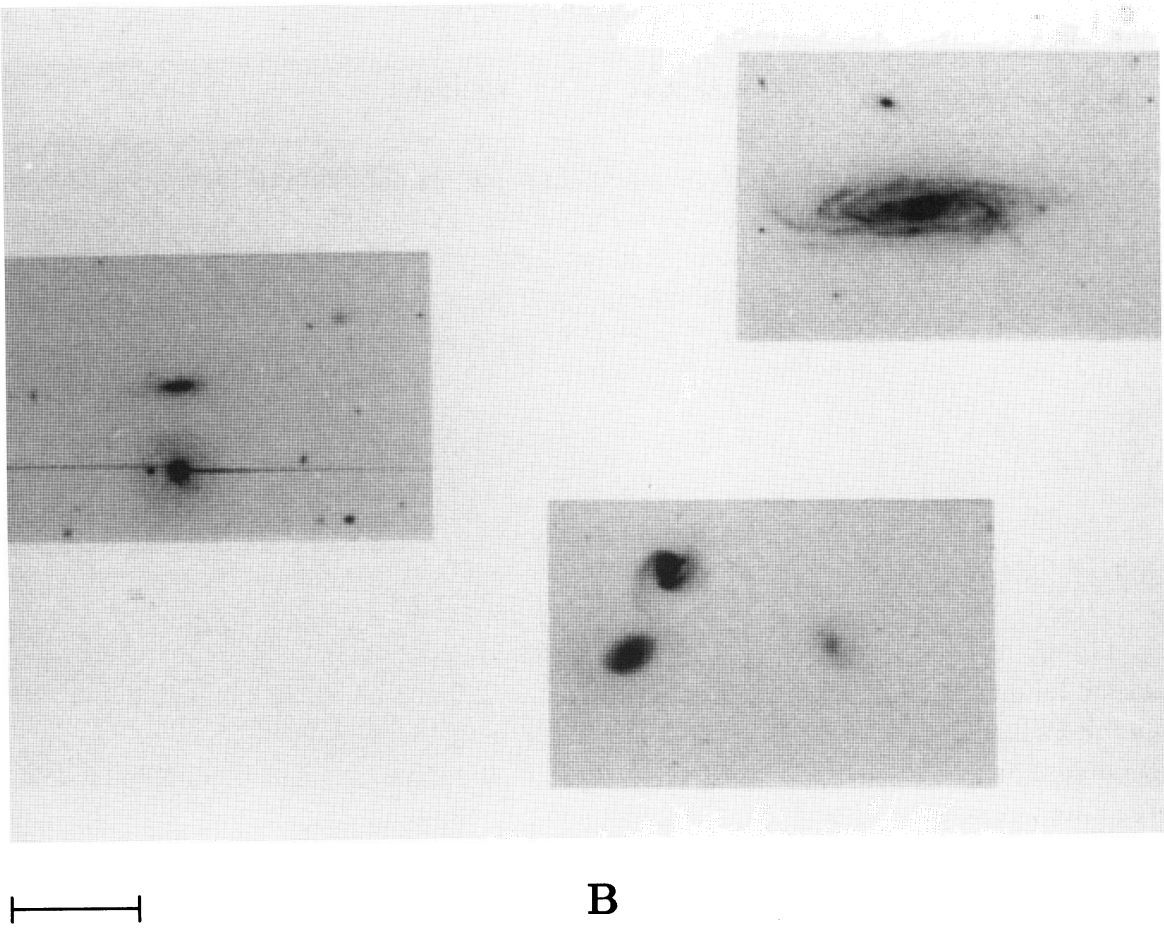
Group 54 (also Rose 27) consists of a large spiral galaxy with two fainter, apparently interacting neighbours. The fourth galaxy (d) has a significantly higher redshift. The brightest galaxy is a radio source. The accordant triplet has a relatively low velocity dispersion and indicated mass-to-light ratio.

GROUP DATA

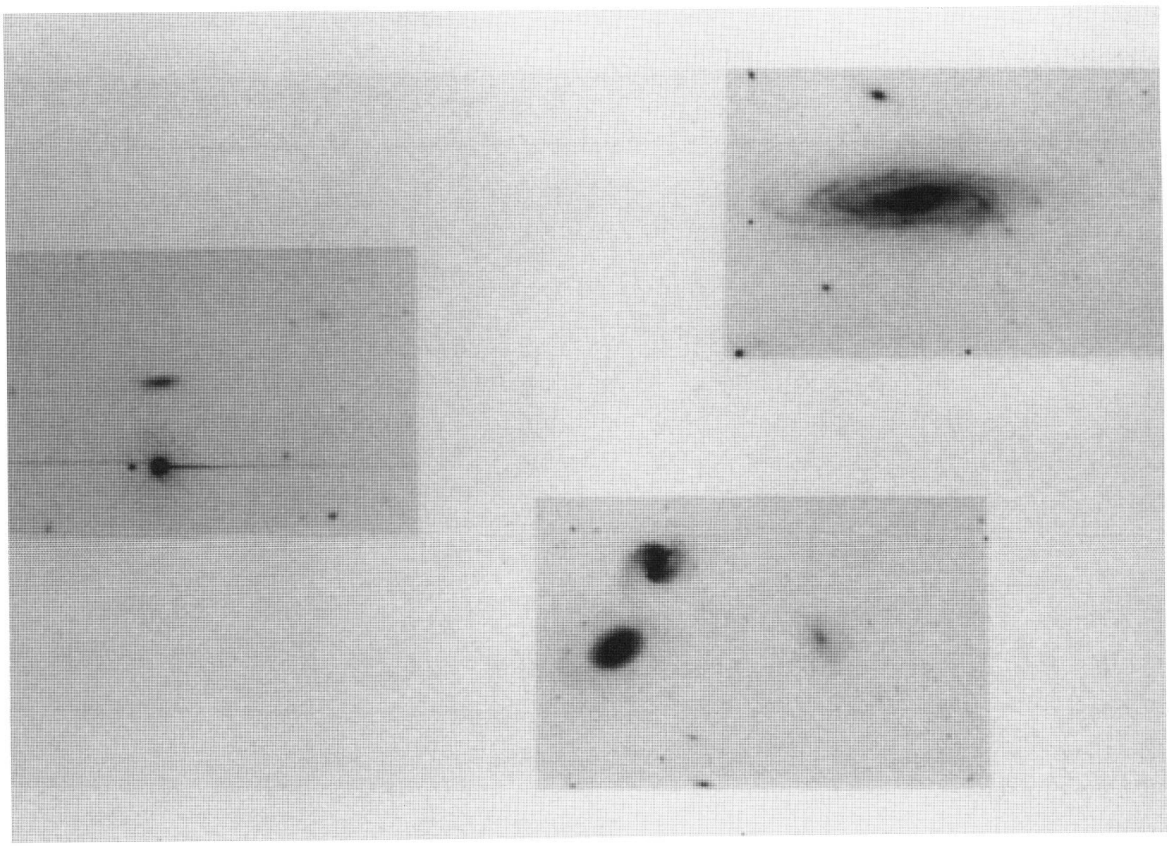
r.a. (1950)	(h m s)	11 26 23.58
dec. (1950)	(° ' ")	+21 02 24.8
galactic longitude	(°)	227.18
galactic latitude	(°)	+70.15
mean redshift		0.0206
total blue magnitude (B_{TC})		12.54
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	57.5
radial velocity dispersion	(km/s)	81.3
crossing time	(Ht_c)	0.0724
mass-to-light ratio	($M_\odot/L_\odot$)	5.5

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	26 13.0	26 22.7	26 21.2	26 37.4
δ	(' ")	04 15.3	00 54.2	01 32.3	02 57.3
v	(km/s)	6261	6166	6060	9070
Δv	(km/s)	31	81	50	174
T		SBbc	S0	SBs	Sc
a	(")	69.60	24.50	19.50	14.80
b	(")	23.40	14.30	12.00	8.20
B_{TC}		12.91	14.73	14.81	16.27
$B-R$		1.30	1.57	1.00	1.22
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	7.90			
name		N3697		M1296	

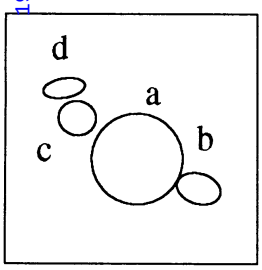


B



R

Group 54



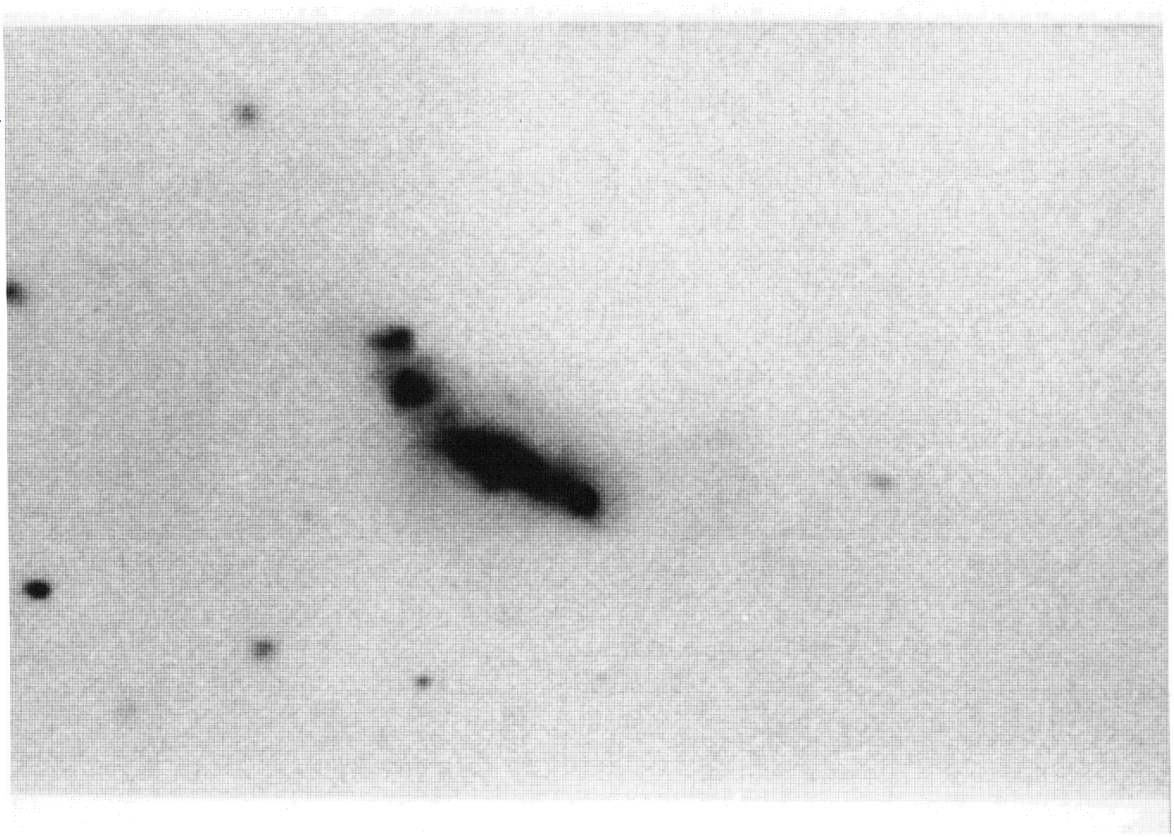
This remarkable group is a very small chain of four gas-rich galaxies with a median separation of only $1.6h^{-1}$ kpc. A diffuse envvelope is visible surrounding galaxies a and b. The crossing time of this system is extremely short – about a thousandth of the Hubble time.

GROUP DATA

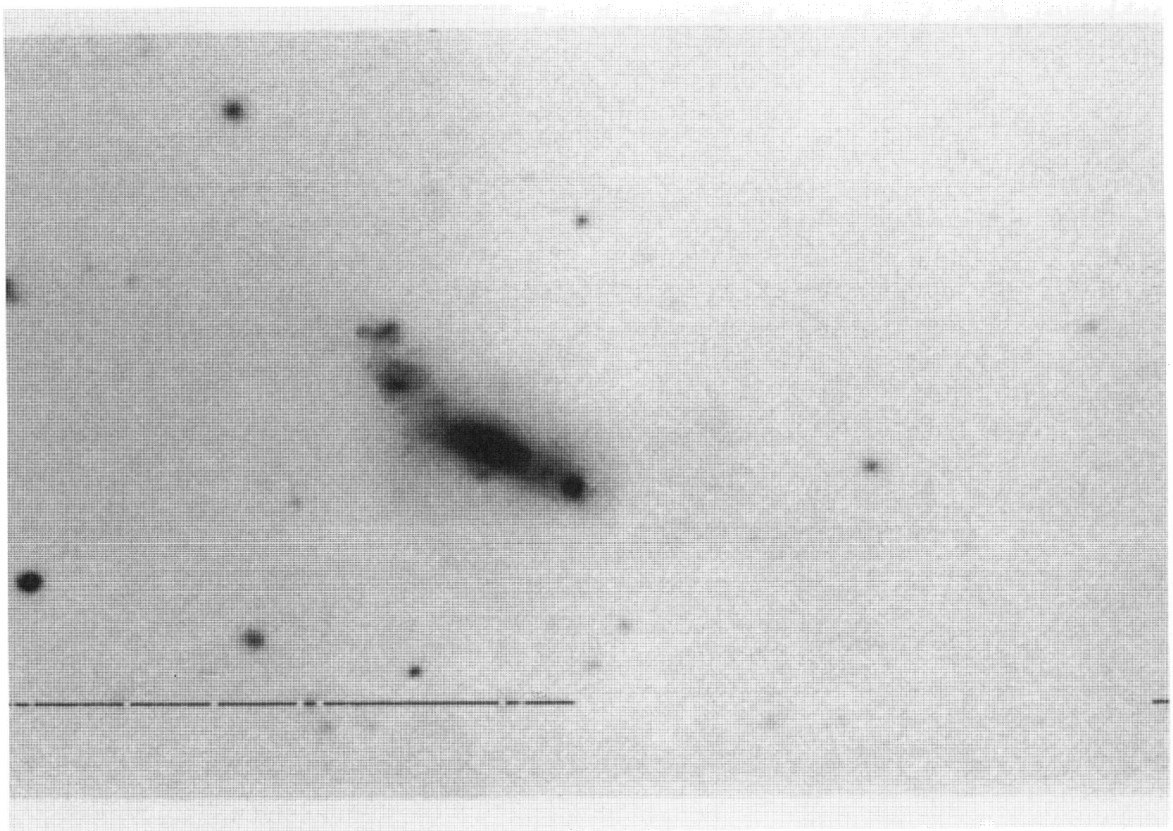
r.a. (1950)	(h m s)	11 26 38.24
dec. (1950)	(° ' ")	+20 51 38.4
galactic longitude	(°)	227.73
galactic latitude	(°)	+70.13
mean redshift		0.0049
total blue magnitude (B_{TC})		13.65
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	1.6
radial velocity dispersion	(km/s)	112.2
crossing time	(Ht_c)	0.0011
mass-to-light ratio	($M_\odot/L_\odot$)	32.4

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	26 37.9	26 36.8	26 39.0	26 39.3
δ	(' ")	51 33.2	51 25.7	51 43.6	51 51.3
v	(km/s)	1397	1412	1420	1670
Δv	(km/s)	46	33	35	50
T		Sdm	Im	Im	Im
a	(")	11.60	5.70	4.80	5.40
b	(")	11.60	3.90	4.40	2.50
B_{TC}		13.86	16.08	16.80	18.02
$B-R$		0.88	0.70	0.65	0.53
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name		I700			

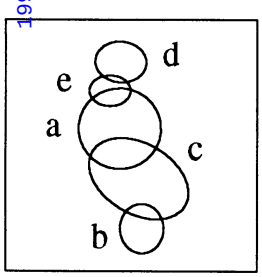


B



R

Group 55



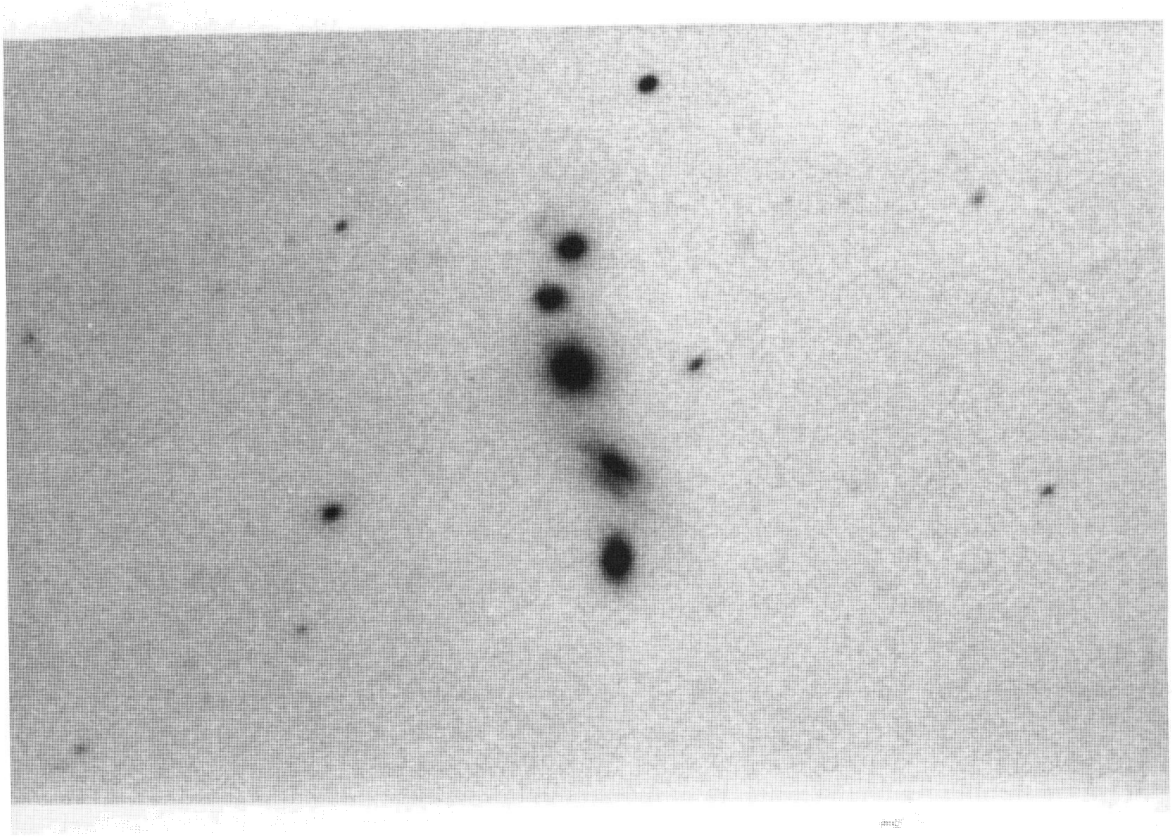
This famous group is number 172 in the catalogue of Vorontsov-Vel'yaminov. It is a very compact linear chain of five galaxies. Four of these are early-type galaxies with accordant redshifts. The fifth, fainter, galaxy is a small spiral galaxy with a much higher redshift.

GROUP DATA

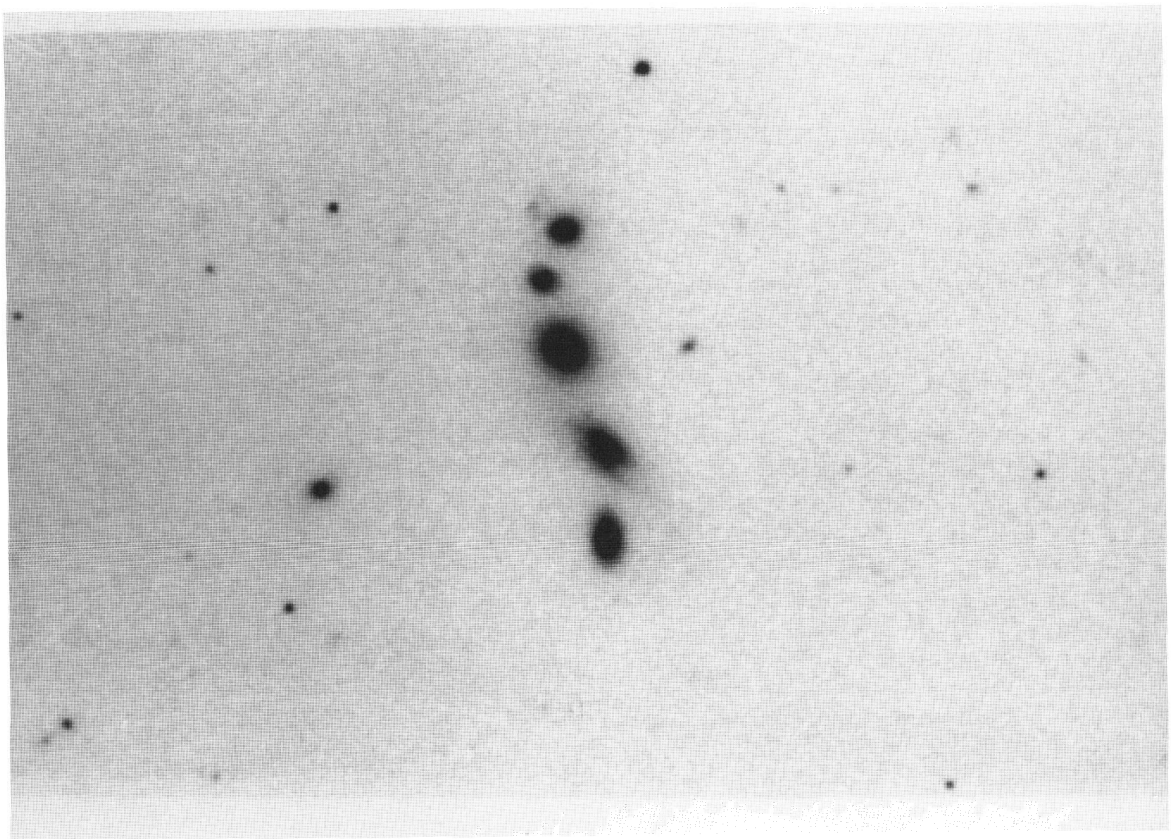
r.a. (1950)	(h m s)	11 29 08.02
dec. (1950)	(° ' ")	+71 05 26.5
galactic longitude	(°)	131.98
galactic latitude	(°)	+44.89
mean redshift		0.0526
total blue magnitude (B_{TC})		14.48
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	19.1
radial velocity dispersion	(km/s)	213.8
crossing time	(Ht_c)	0.0074
mass-to-light ratio	($M_\odot/L_\odot$)	22.4

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	29 08.4	29 07.0	29 07.2	29 08.4	29 09.1
δ	(' ")	05 29.4	04 57.4	05 13.4	05 50.8	05 41.5
v	(km/s)	15820	15690	15480	16070	36880
Δv	(km/s)	100	100	100	100	100
T		E0	S0	E3	E2	Sc
a	(")	13.20	7.90	17.20	8.20	6.60
b	(")	12.90	7.00	11.30	6.60	5.00
B_{TC}		15.43	16.06	16.60	16.81	17.06
$B-R$		1.67	1.68	1.83	1.81	1.35
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name		U6514	U6514	U6514	U6514	U6514

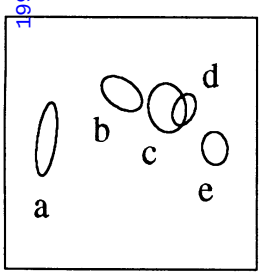


B



R

Group 56



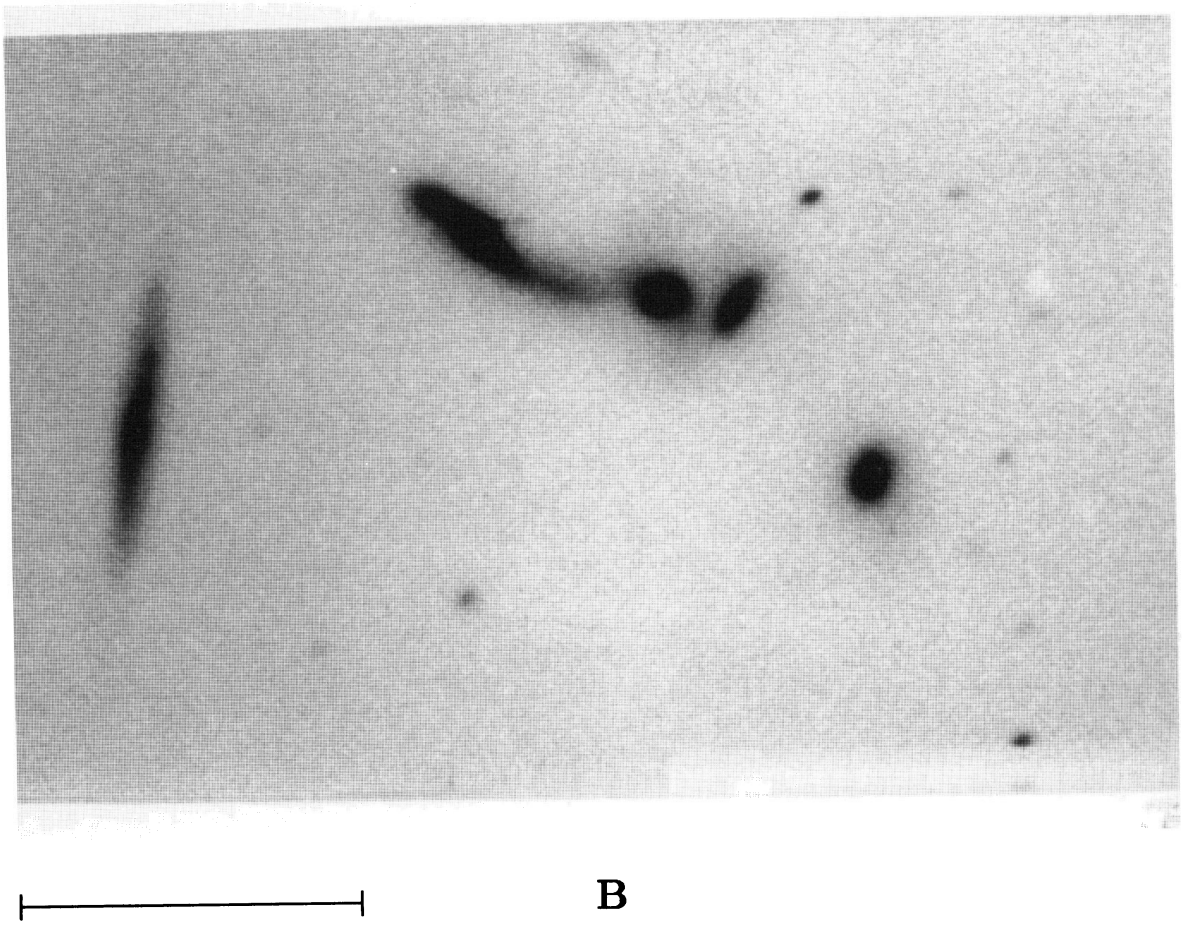
Group 56 consists of five galaxies, three of which are apparently in contact and interacting. Two of these three (b and d) are radio sources. Infrared emission is also detected from the interacting system.

GROUP DATA

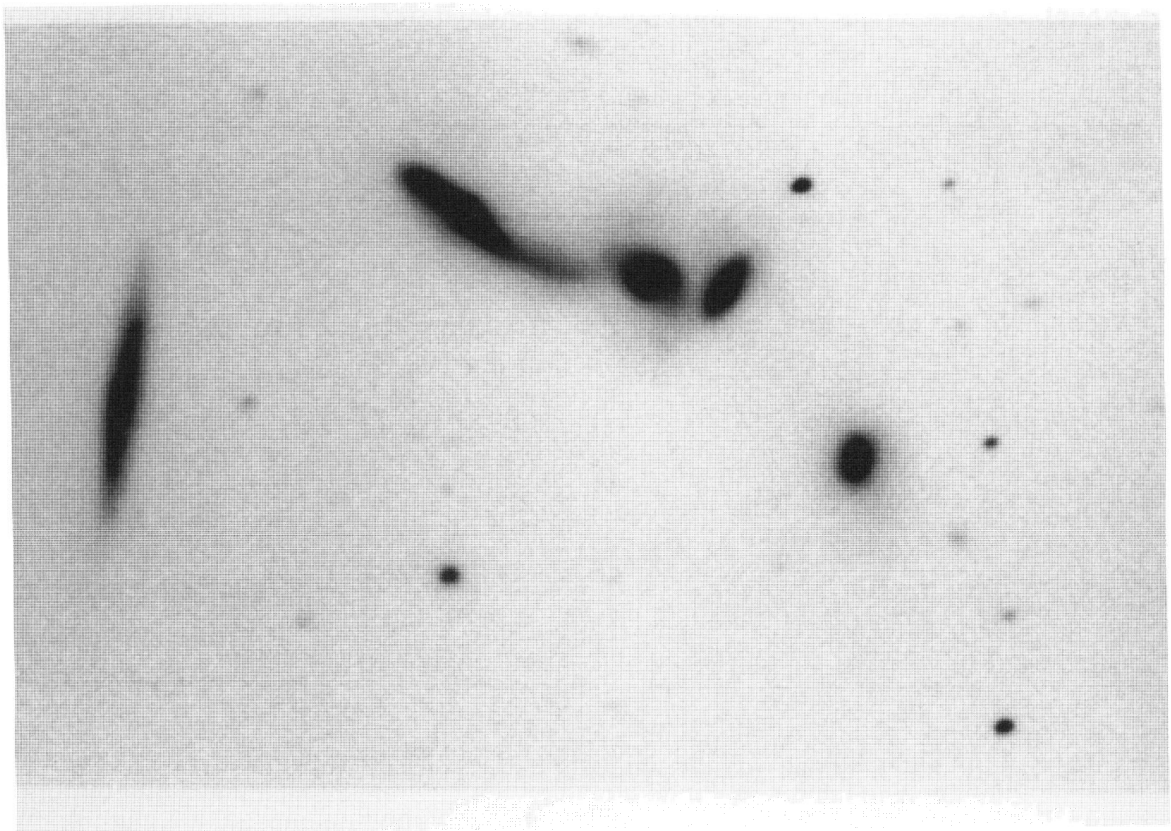
r.a. (1950)	(h m s)	11 29 53.51
dec. (1950)	(° ' ")	+53 13 16.5
galactic longitude	(°)	147.15
galactic latitude	(°)	+60.32
mean redshift		0.0270
total blue magnitude (B_{TC})		13.59
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	21.4
radial velocity dispersion	(km/s)	169.8
crossing time	(Ht_c)	0.0095
mass-to-light ratio	($M_\odot/L_\odot$)	26.3

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	30 01.9	29 55.6	29 51.8	29 50.4	29 47.9
δ	(' ")	13 01.5	13 36.0	13 25.4	13 24.2	12 55.3
v	(km/s)	8245	7919	8110	8346	7924
Δv	(km/s)	35	38	28	56	63
T		Sc	SB0	S0	S0	S0
a	(")	27.90	17.10	18.40	12.50	12.50
b	(")	7.00	10.40	14.00	7.90	9.50
B_{TC}		15.24	14.50	15.37	16.52	16.23
$B-R$		1.51	1.43	1.52	1.62	1.20
$\log F_{60\mu}$	(Jy)			0.75		
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)		23.70		0.82	
name		M176	U6257	U6257	U6257	

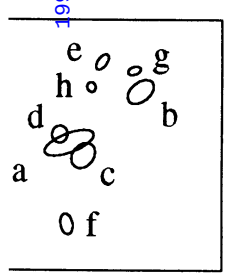


B



R

Group 57



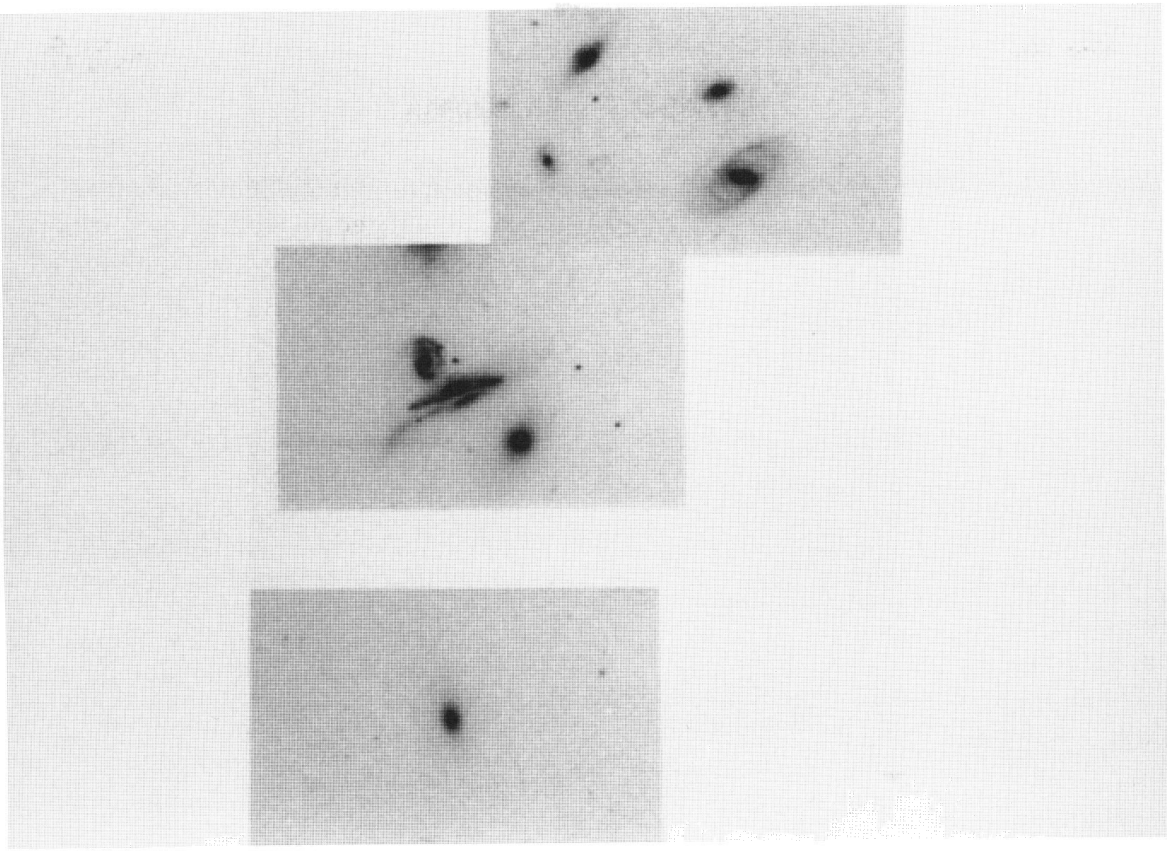
This is a populous group of 8 galaxies, also known as Arp 320 and VV 282. Redshifts have been measured for seven members and are all found to be accordant. The small compact galaxy (d) interacting with the bright spiral (a) is a radio and infrared source.

ROUP DATA

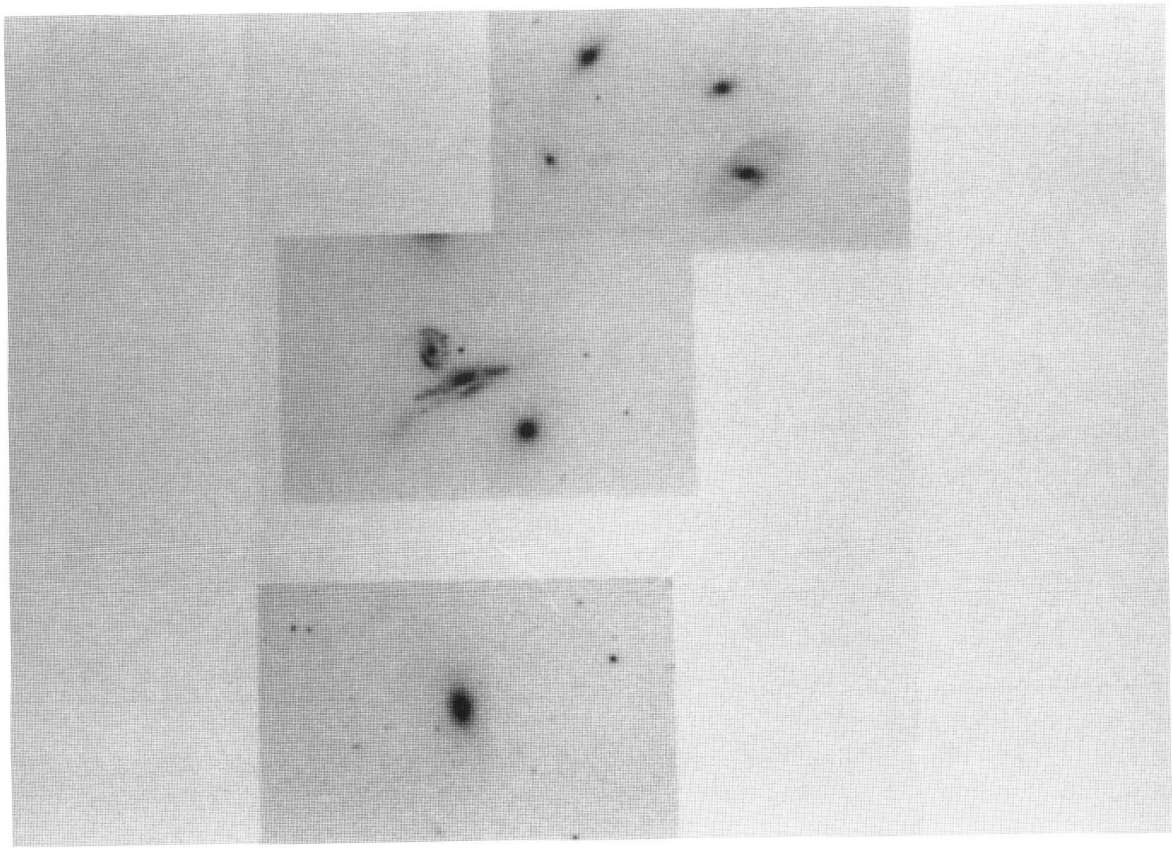
a. (1950)	(h m s)	11 35 13.83
ec. (1950)	(° ' ")	+22 16 11.8
ılactic longitude	(°)	225.99
ılactic latitude	(°)	+72.52
ean redshift		0.0304
tal blue magnitude (B_{TC})		12.55
ımber of galaxies		8
ımber of accordant galaxies		7
edian galaxy separation	(kpc)	72.4
dial velocity dispersion	(km/s)	269.2
ossing time	(Ht_c)	0.0204
ass-to-light ratio	($M_\odot/L_\odot$)	69.2

ALAXY DATA

alaxy:		a	b	c	d	e	f	g	h
	(m s)	35 17.3	35 07.1	35 15.2	35 18.6	35 12.6	35 17.6	35 08.1	35 14.2
	(' ")	15 27.9	17 10.4	15 02.7	15 45.2	18 09.6	12 46.8	17 51.8	17 19.6
	(km/s)	8727	9022	9081	8977	8992	9594	9416	
v	(km/s)	31	20	36	41	105	105	105	
		Sb	SBb	E3	SBc	S0a	E4	SB0	SBb
	(")	51.50	30.00	27.40	17.30	18.00	20.80	13.40	10.00
	(")	19.10	18.90	21.00	15.50	9.10	12.00	7.90	8.50
r_C		13.99	14.32	14.63	14.51	15.37	15.22	15.84	16.75
$-R$		1.73	1.55	1.57	1.26	1.71	1.07	1.65	1.53
$\xi F_{60\mu}$	(Jy)				0.43				
$\xi F_{100\mu}$	(Jy)				1.32				
ξF_{20cm}	(mJy)				4.44				
me		N3753	N3746	N3750	N3754	N3748	N3751	N3745	

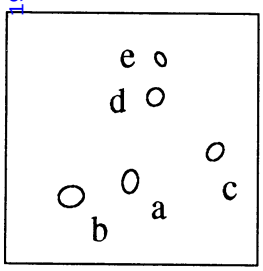


B



R

Group 58



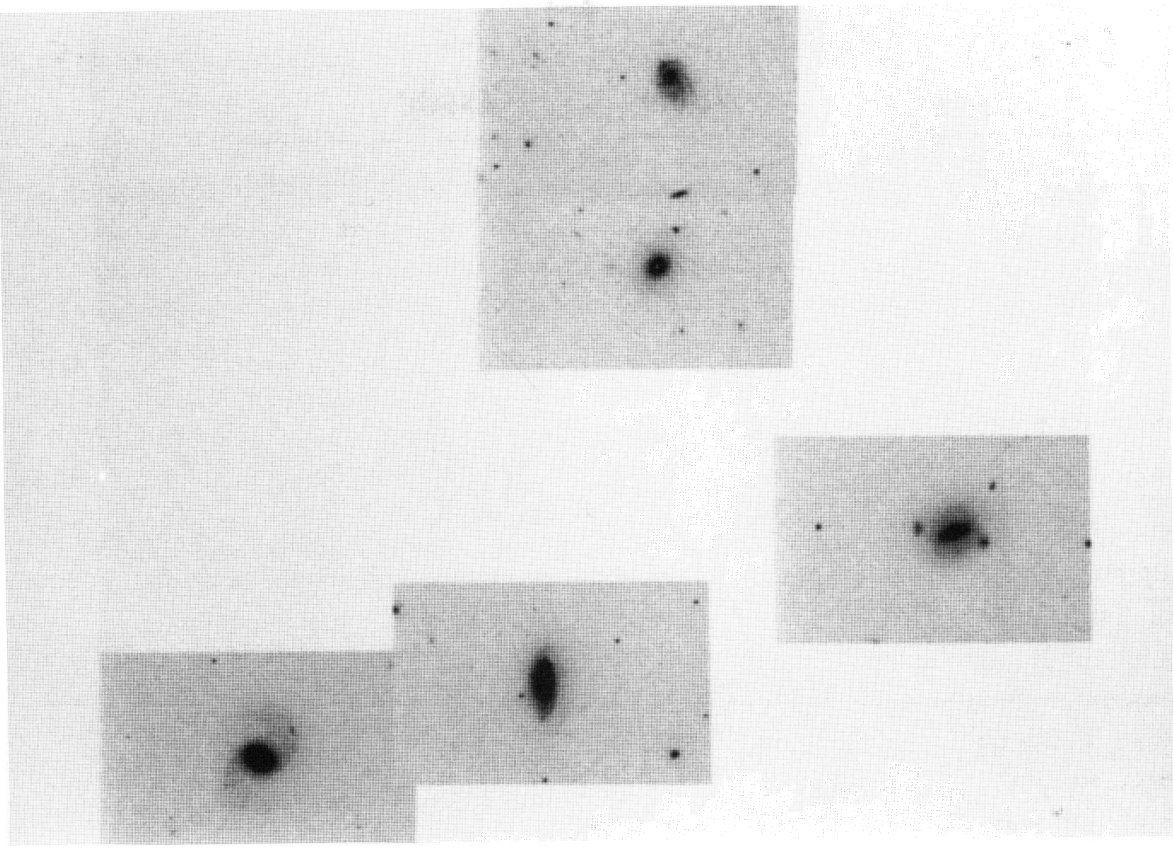
This is a fairly loose group of five galaxies, mostly spiral. The brightest (NGC 3822) has infrared and radio emission. Galaxy c is also a weak radio source.

GROUP DATA

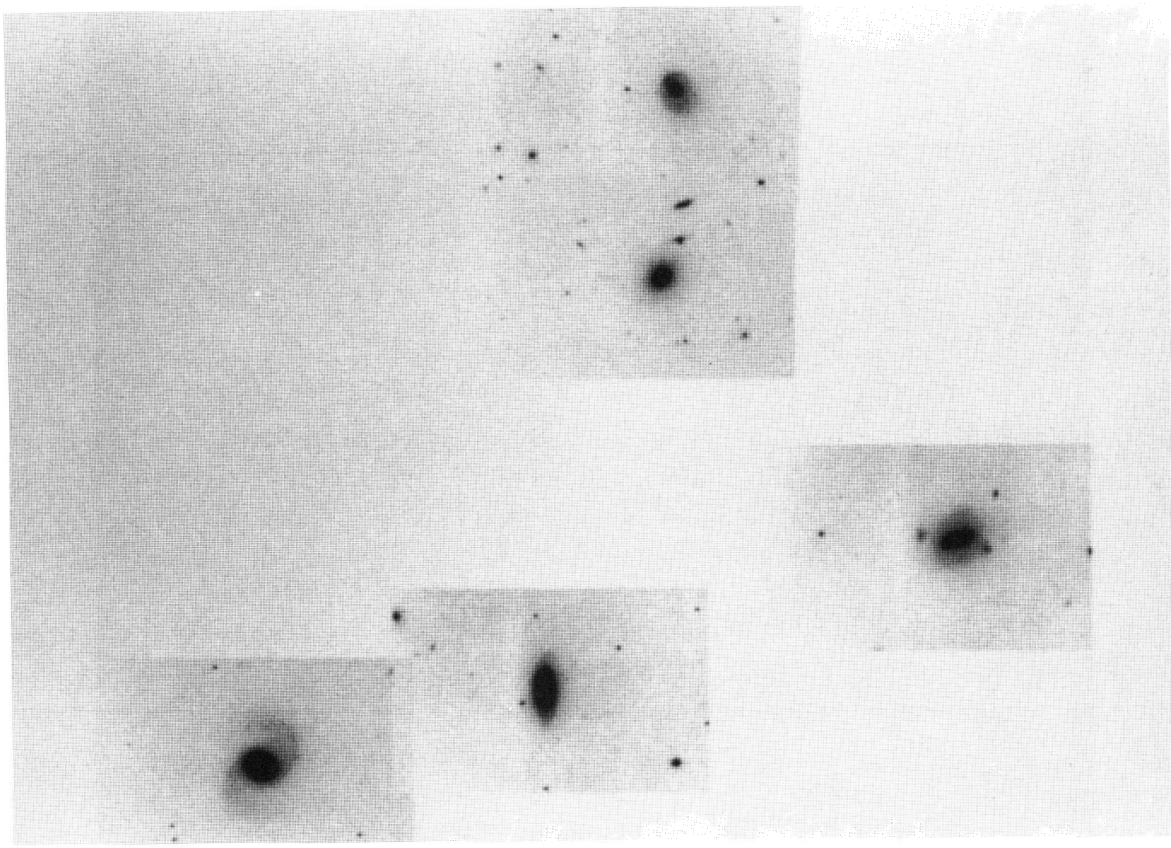
r.a. (1950)	(h m s)	11 39 32.94
dec. (1950)	(° ' ")	+10 35 36.8
galactic longitude	(°)	255.47
galactic latitude	(°)	+66.57
mean redshift		0.0207
total blue magnitude (B_{TC})		12.15
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	89.1
radial velocity dispersion	(km/s)	162.2
crossing time	(Ht_c)	0.0407
mass-to-light ratio	($M_\odot/L_\odot$)	53.7

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	39 36.3	39 48.8	39 18.4	39 31.1	39 30.1
δ	(' ")	33 18.4	32 29.9	34 53.3	37 41.8	39 40.6
v	(km/s)	6138	6503	6103	6270	6052
Δv	(km/s)	20	17	19	27	33
T		Sb	SBab	SB0a	E1	Sbc
a	(")	36.70	40.10	30.60	28.40	23.20
b	(")	24.00	32.30	22.40	25.00	14.10
B_{TC}		13.56	13.66	14.11	14.67	15.21
$B-R$		1.31	1.57	1.27	1.48	1.20
$\log F_{60\mu}$	(Jy)	3.13				
$\log F_{100\mu}$	(Jy)	6.72				
$\log F_{20cm}$	(mJy)	23.78		1.08		
name		N3822	N3825	N3817	N3819	N3820

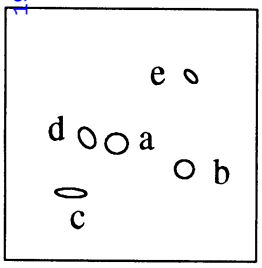


B



R

Group 59



This group (Rose 7) consists of an accordant quartet of small galaxies plus a fainter high-redshift galaxy. The brightest galaxy in quartet (a) is a radio source, and the faintest (d) is an infrared source.

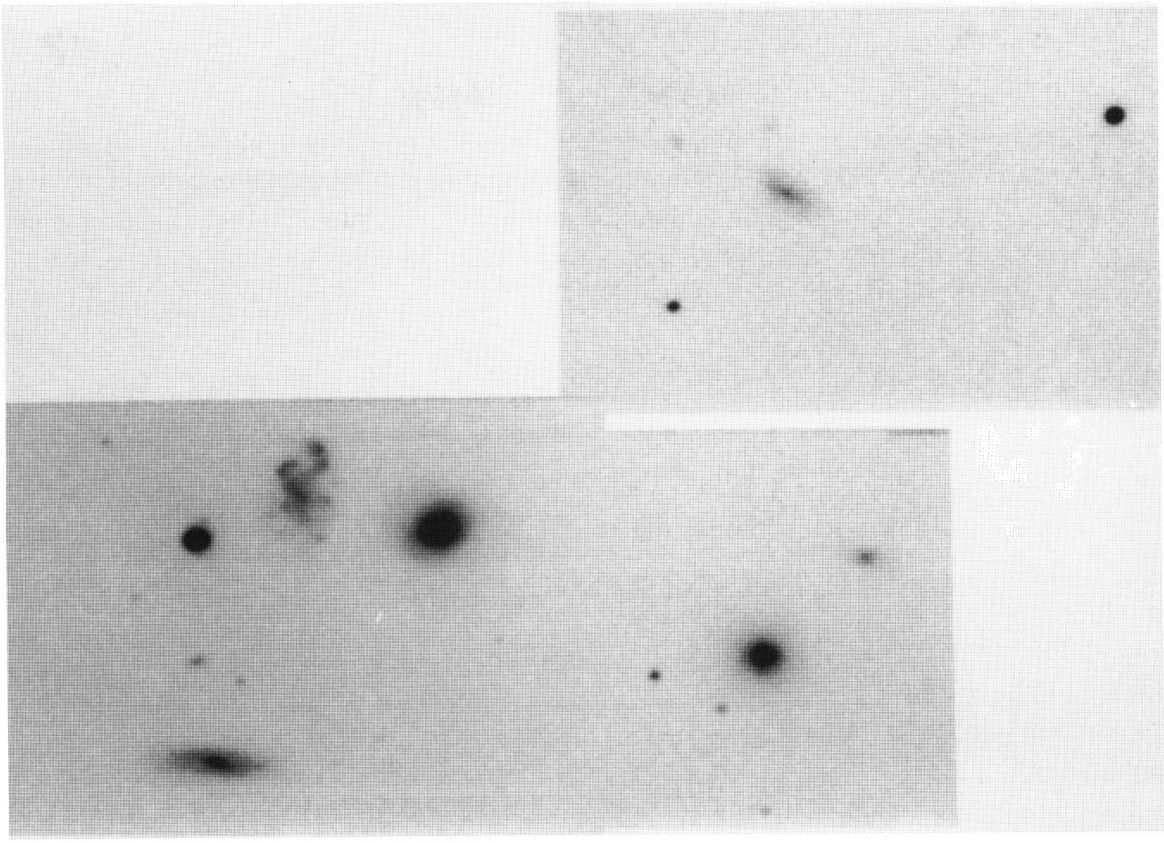
GROUP DATA

r.a. (1950)	(h m s)	11 45 51.47
dec. (1950)	(° ' ")	+13 00 18.4
galactic longitude	(°)	254.16
galactic latitude	(°)	+69.39
mean redshift		0.0135
total blue magnitude (B_{TC})		13.29
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	21.4
radial velocity dispersion	(km/s)	190.5
crossing time	(Ht_c)	0.0085
mass-to-light ratio	($M_\odot/L_\odot$)	141.3

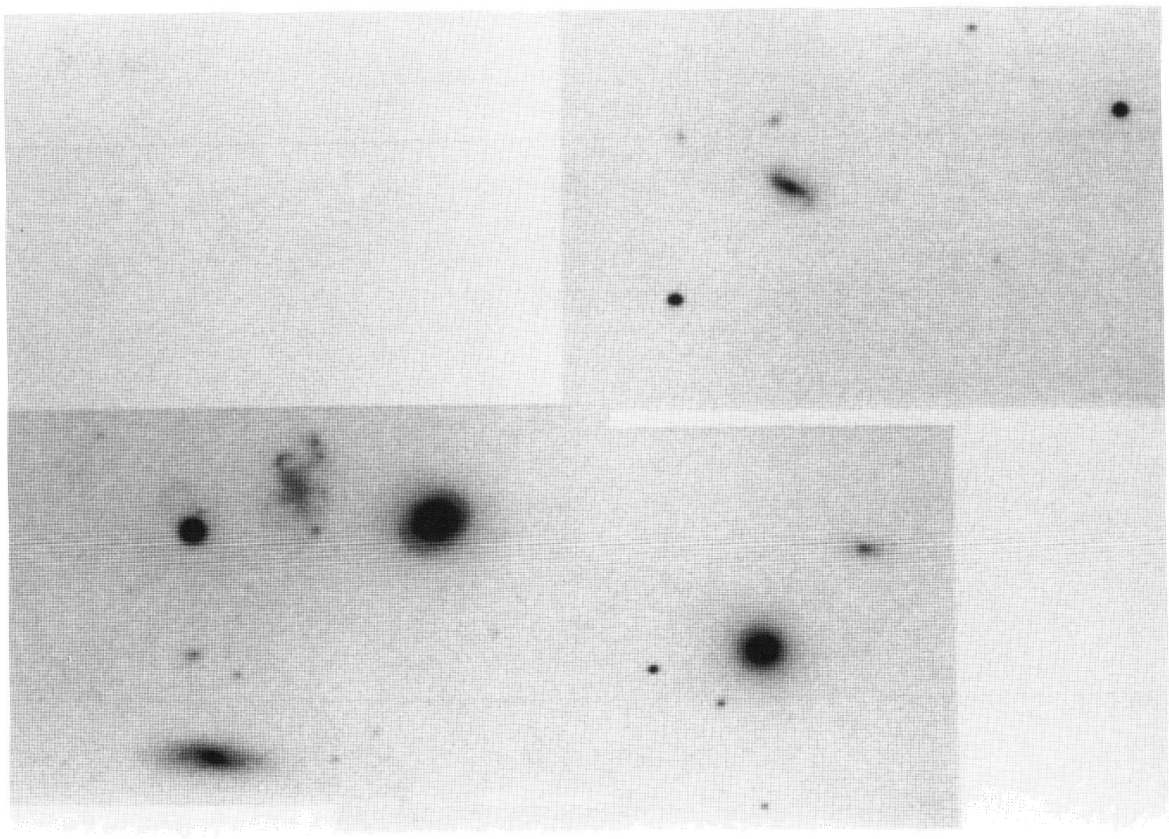
GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	45 52.9	45 45.6	45 57.9	45 56.1	45 44.9
δ[1]	(' ")	00 19.0	59 38.7	58 59.5	00 27.9	02 07.1
v	(km/s)	4109	3908	4347	3866	23700
Δv	(km/s)	31	58	38	36	240
T		Sa	E0	Sc	Im	Scd
a	(")	17.70	15.00	24.70	17.70	12.80
b	(")	16.30	14.40	7.00	11.50	6.30
B_{TC}		14.52	15.20	14.40	15.80	16.60
$B-R$		1.38	1.55	1.03	0.77	1.58
$\log F_{60\mu}$	(Jy)				3.43	
$\log F_{100\mu}$	(Jy)				3.67	
$\log F_{20cm}$	(mJy)	3.18				
name		I736			I737	

1. Degrees for 59b and 59c is +12.

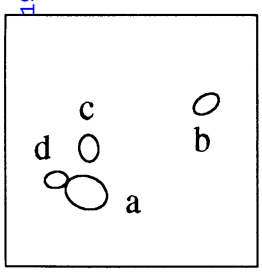


B



R

Group 60



Group 60 is a compact configuration of galaxies within a larger cluster. Galaxies a and c are relatively strong radio sources. The velocity dispersion of the system is quite high.

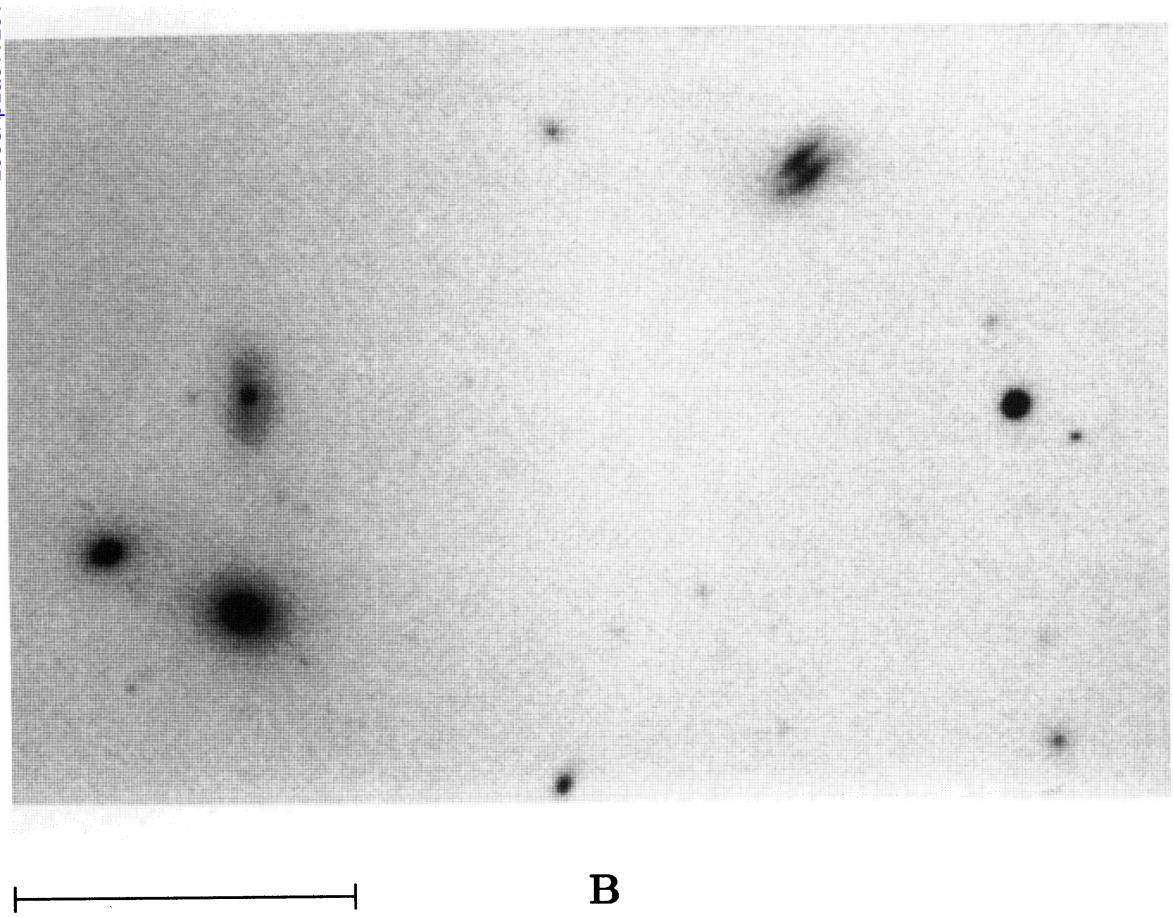
GROUP DATA

r.a. (1950)	(h m s)	13 00 18.4
dec. (1950)	(° ' ")	+51 57 42.1
galactic longitude	(°)	140.04
galactic latitude	(°)	+63.81
median redshift		0.0625
total blue magnitude (B_{TC})		14.22
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	56.2
radial velocity dispersion	(km/s)	426.6
crossing time	(Ht_c)	0.0102
mass-to-light ratio	($M_\odot/L_\odot$)	162.2

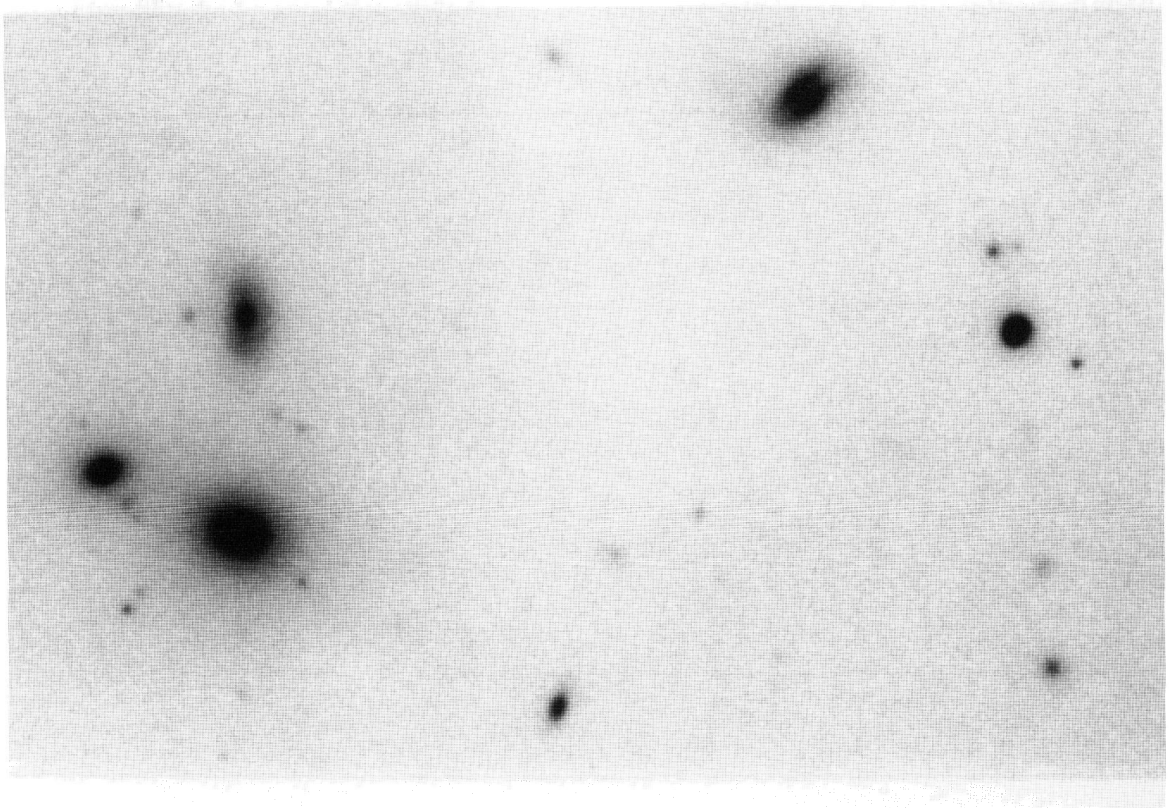
GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	00 34.2	00 23.8	00 34.0	00 36.9
δ	(' ")	57 12.3	58 24.5	57 48.9	57 22.8
v	(km/s)	19007	18318	19277	18300
Δv	(km/s)	46	90	180	154
T		E2	E4	SBc	S0
a	(")	17.30	11.30	11.10	9.40
b	(")	13.40	7.00	7.80	6.70
B_{TC}		15.04	16.00	16.16	16.16
$B-R$		1.76	1.69	1.60	1.61
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F^1_{20cm}$	(mJy)	55.25		14.12	
name					

1. Flux for 60a is that of the central component only.

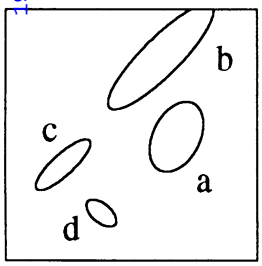


B



R

Group 61



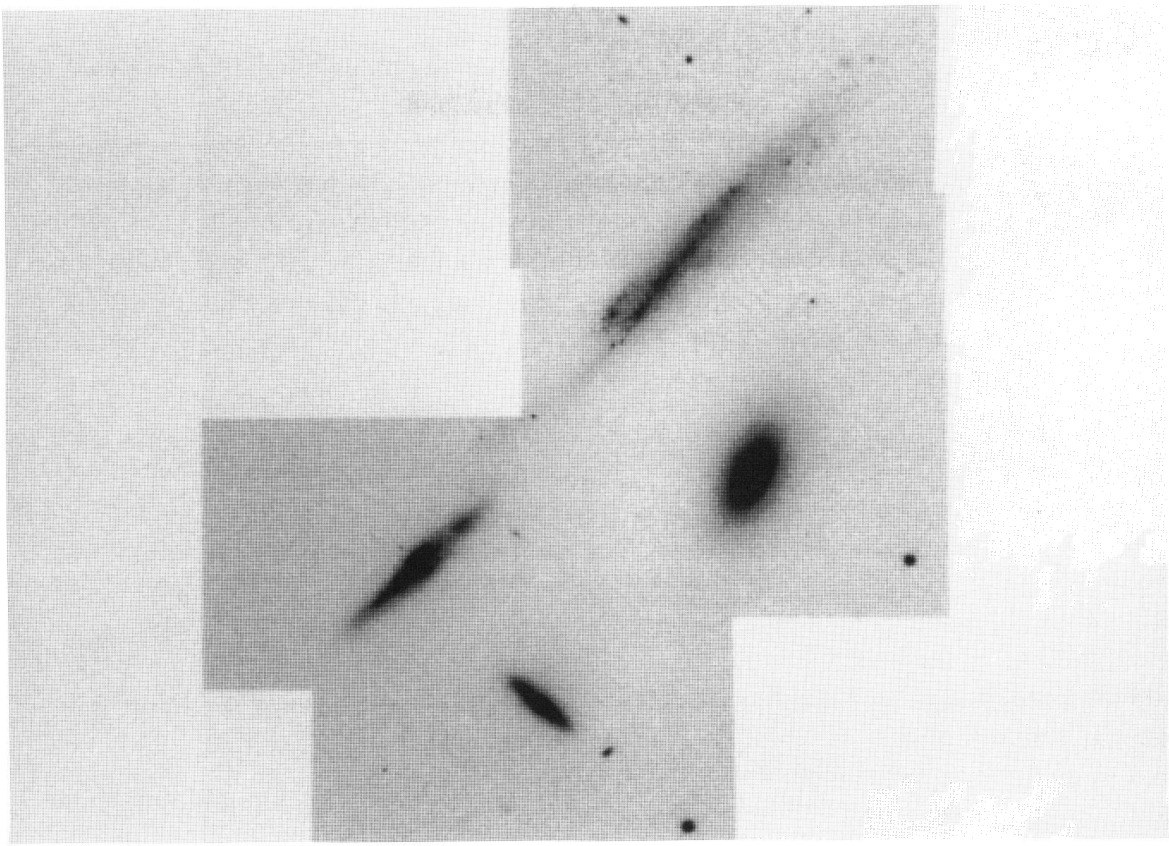
Group 61 is commonly known as "the box" and is number 10 in the catalogue of Rose. It is actually a triplet, the large irregular galaxy (b, NGC 4173) having a lower redshift. Galaxy c (NGC 4175) is a radio and infrared source.

GROUP DATA

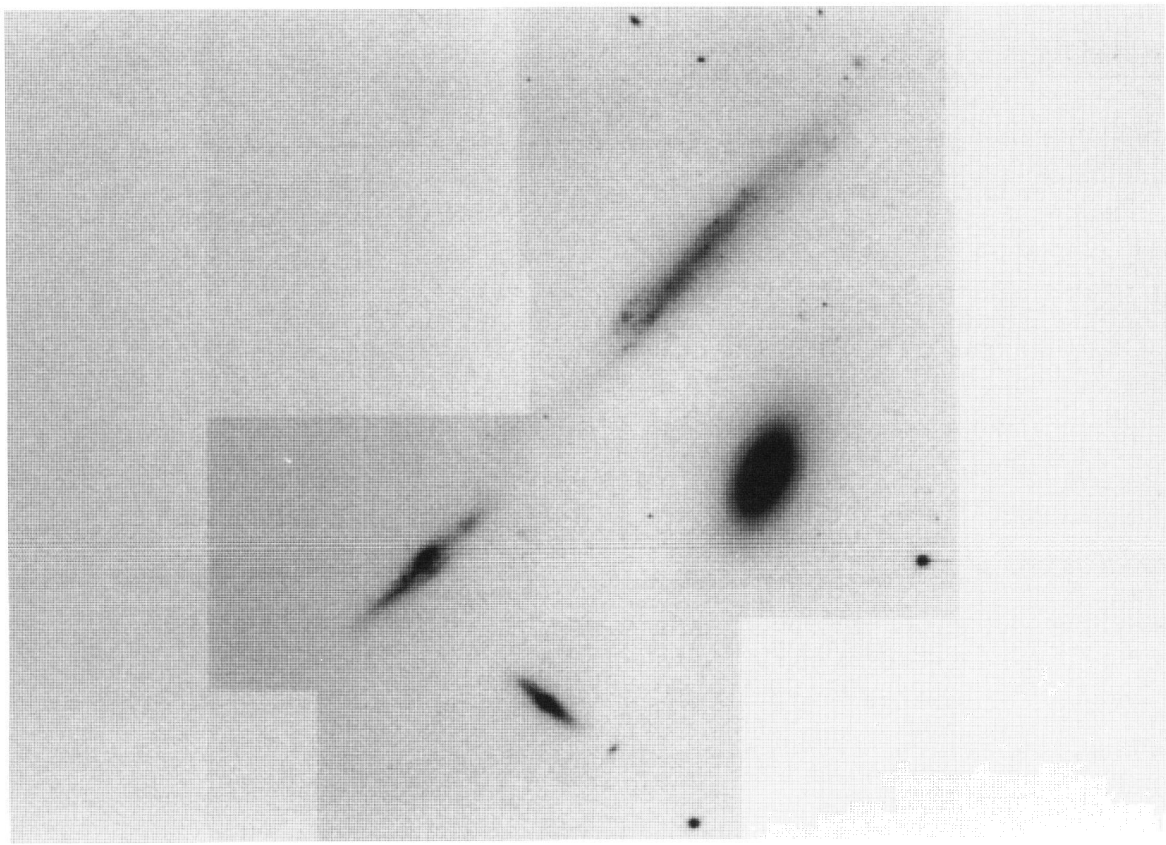
r.a. (1950)	(h m s)	12 09 52.20
dec. (1950)	(° ' ")	+29 27 19.2
galactic longitude	(°)	197.26
galactic latitude	(°)	+81.15
mean redshift		0.0130
total blue magnitude (B_{TC})		11.61
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	28.8
radial velocity dispersion	(km/s)	87.1
crossing time	(Ht_c)	0.0251
mass-to-light ratio	($M_\odot/L_\odot$)	14.5

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	09 46.6	09 48.3	09 59.0	09 54.8
δ	(' ")	27 28.2	29 23.4	26 47.6	25 37.7
v	(km/s)	3784	1127	3956	3980
Δv	(km/s)	18	20	20	30
T		S0a	Im	Sbc	S0
a	(")	54.30	103.70	51.80	25.60
b	(")	33.70	27.10	15.50	13.70
B_{TC}		12.82	12.59	13.53	14.12
$B-R$		1.50	0.94	1.56	1.40
$\log F_{60\mu}$	(Jy)			5.33	
$\log F_{100\mu}$	(Jy)			10.74	
$\log F_{20cm}$	(mJy)			35.66	
name		N4169	N4173	N4175	N4174

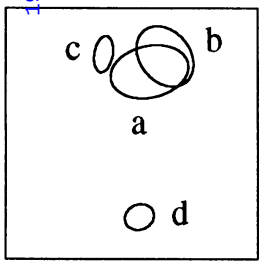


B



R

Group 62



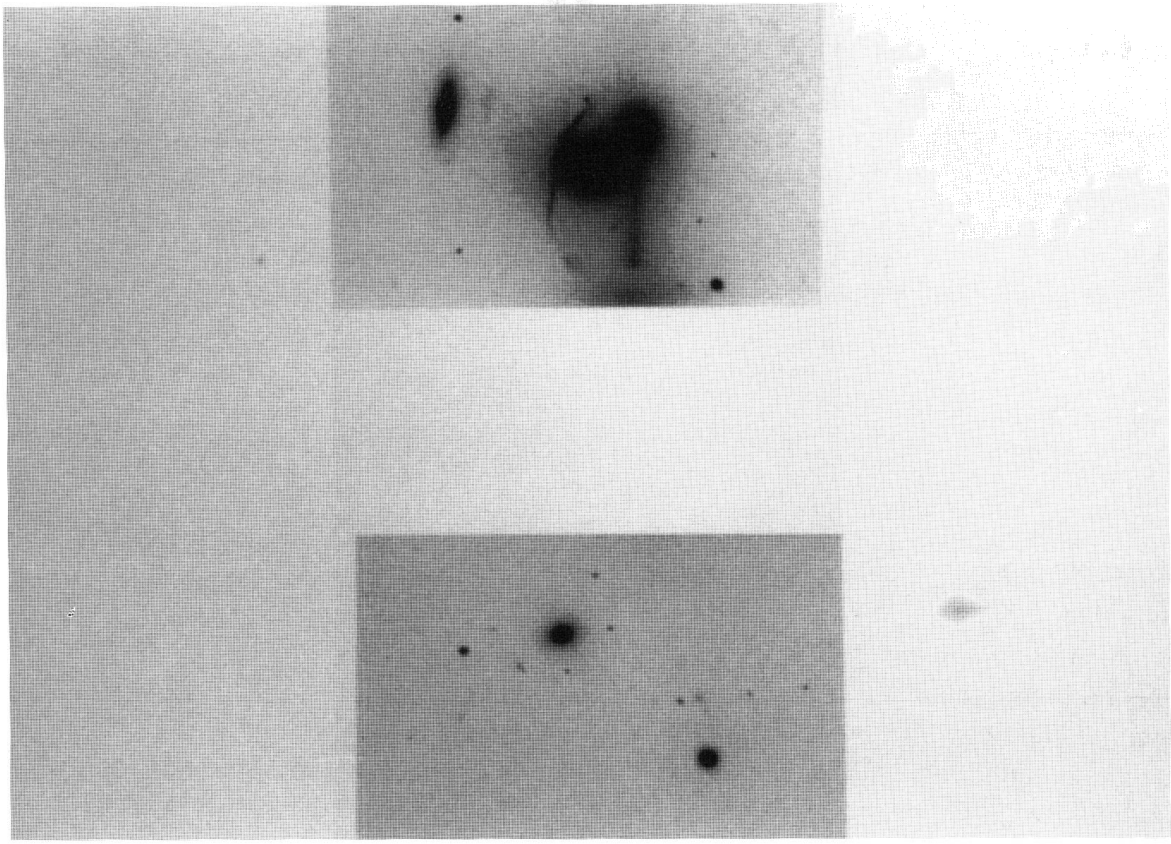
Group 62 is a quartet of early-type galaxies. The brightest two have overlapping images and appear to be interacting. The brightest of the pair has a compact nuclear radio source. The velocity dispersion and inferred mass-to-light ratio of this group are relatively large.

GROUP DATA

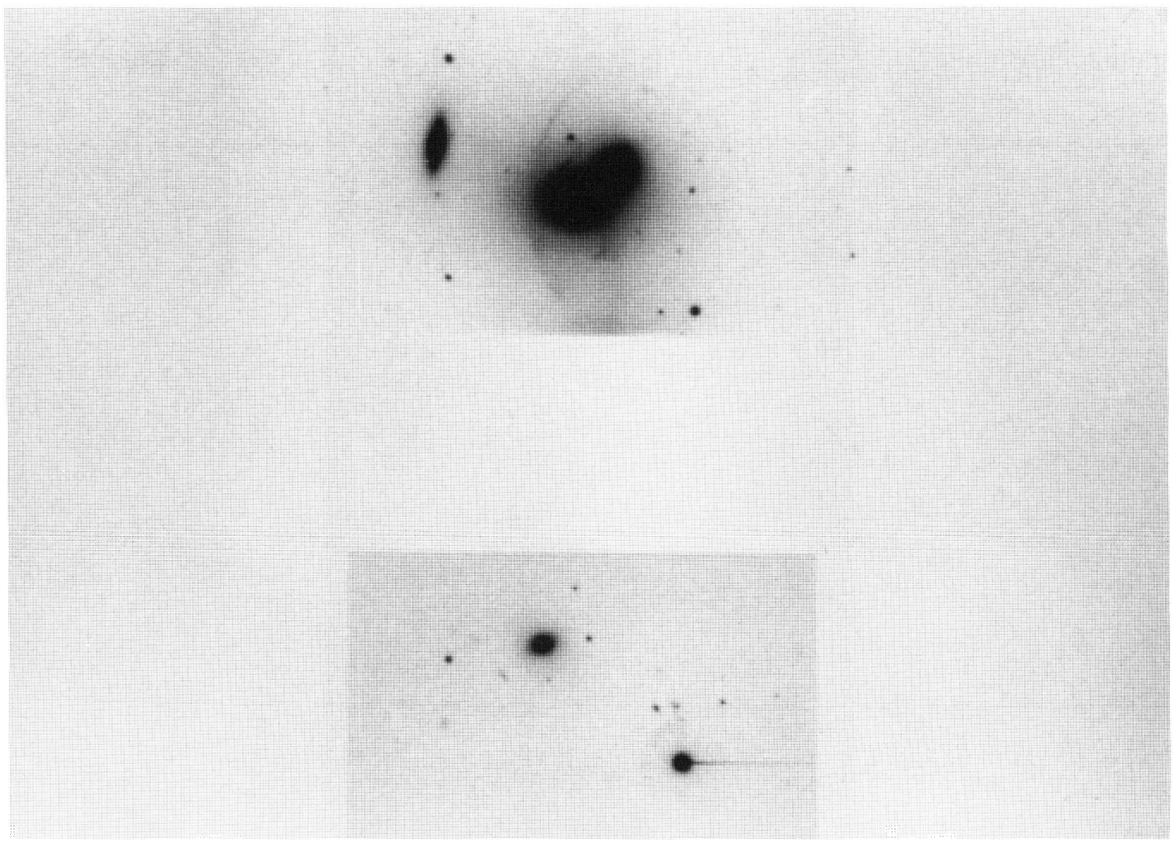
r.a. (1950)	(h m s)	12 50 30.61
dec. (1950)	(° ' ")	-08 56 36.9
galactic longitude	(°)	303.63
galactic latitude	(°)	+53.65
mean redshift		0.0137
total blue magnitude (B_{TC})		12.54
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	26.9
radial velocity dispersion	(km/s)	288.4
crossing time	(Ht_c)	0.0069
mass-to-light ratio	($M_\odot/L_\odot$)	134.9

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	50 29.7	50 28.3	50 33.8	50 30.6
δ	(' ")	55 59.7	55 39.2	55 36.4	59 12.4
v	(km/s)	4355	3651	4359	4123
Δv	(km/s)	38	41	37	76
T		E3	S0	S0	E2
a	(")	52.30	44.20	24.60	19.90
b	(")	34.30	33.30	12.30	16.80
B_{TC}		13.36	13.76	15.57	15.81
$B-R$		2.00	1.71	1.45	1.71
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	3.97			
name					

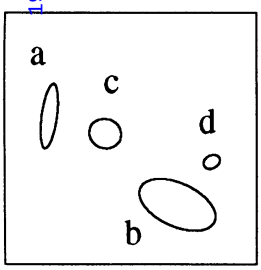


B



R

Group 63



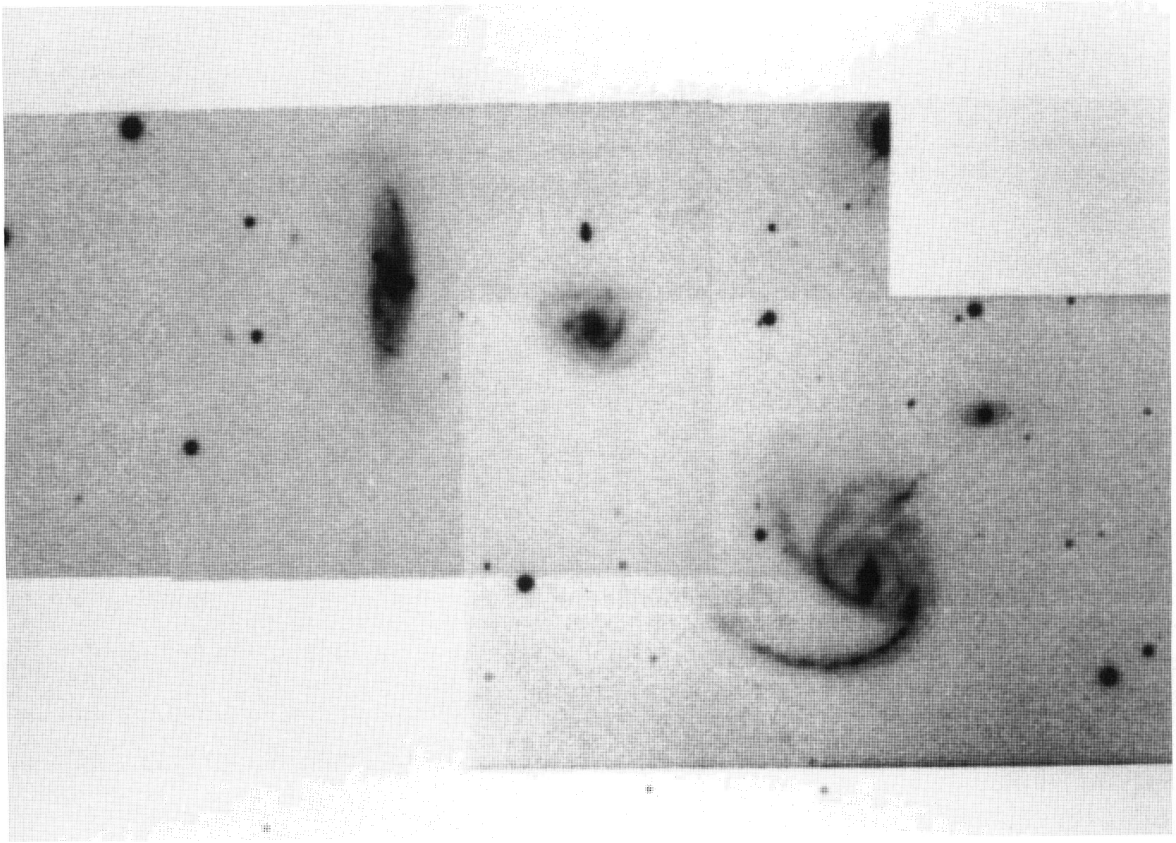
This quartet of spiral galaxies consists of a relatively loose triplet of plus a low-redshift galaxy (a). The small companion (d) to the brightest galaxy in the triplet is an infrared source.

GROUP DATA

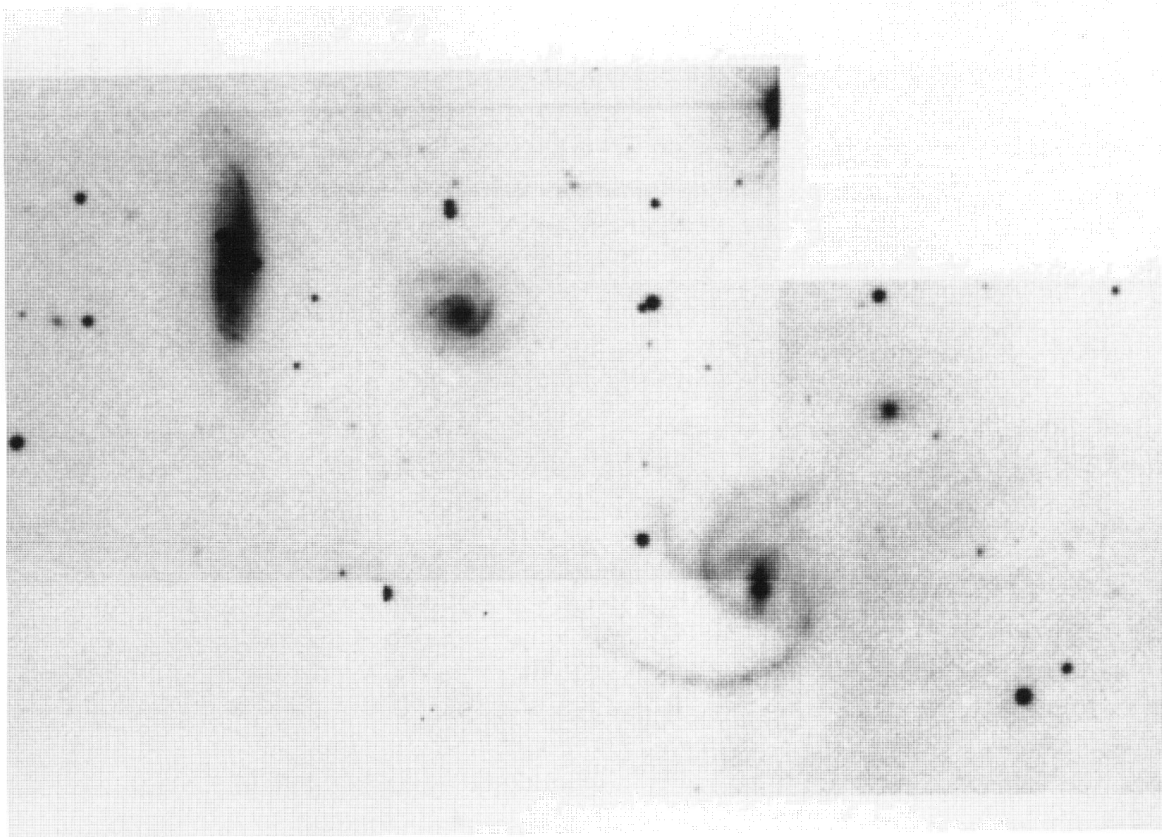
r.a. (1950)	(h m s)	12 59 25.67
dec. (1950)	(° ' ")	-32 30 15.8
galactic longitude	(°)	305.54
galactic latitude	(°)	+30.04
mean redshift		0.0311
total blue magnitude (B_{TC})		12.64
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	44.7
radial velocity dispersion	(km/s)	131.8
crossing time	(Ht_c)	0.0389
mass-to-light ratio	($M_\odot/L_\odot$)	9.3

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	59 32.6	59 22.3	59 28.1	59 19.6
δ	(' ")	29 37.3	31 07.6	29 55.0	30 23.4
v	(km/s)	5228	9346	9460	9141
Δv	(km/s)	29	29	112	133
T		SBbc	SBc	SBc	Sc
a	(")	33.00	41.70	16.60	8.90
b	(")	7.90	22.30	14.90	6.60
B_{TC}		13.97	13.27	14.90	16.79
$B-R$		1.43	0.41	1.10	0.83
$\log F_{60\mu}$	(Jy)				1.15
$\log F_{100\mu}$	(Jy)				3.10
$\log F_{20cm}$	(mJy)				
name					

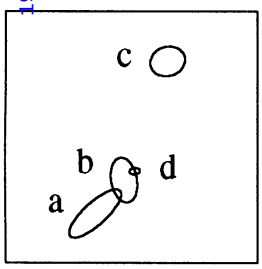


B



R

Group 64



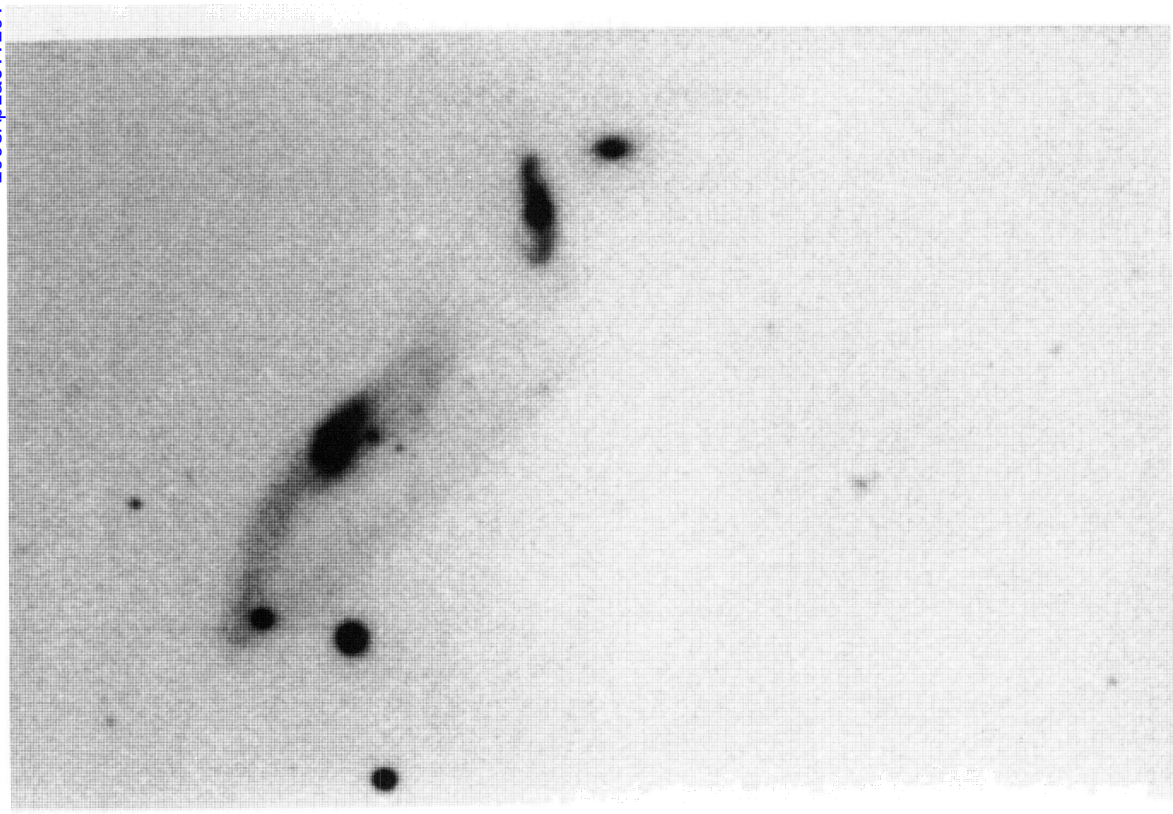
This group is consists of an interacting triplet of mostly spiral galaxies plus a low-redshift member (c). The dynamical properties of the triplet are typical.

GROUP DATA

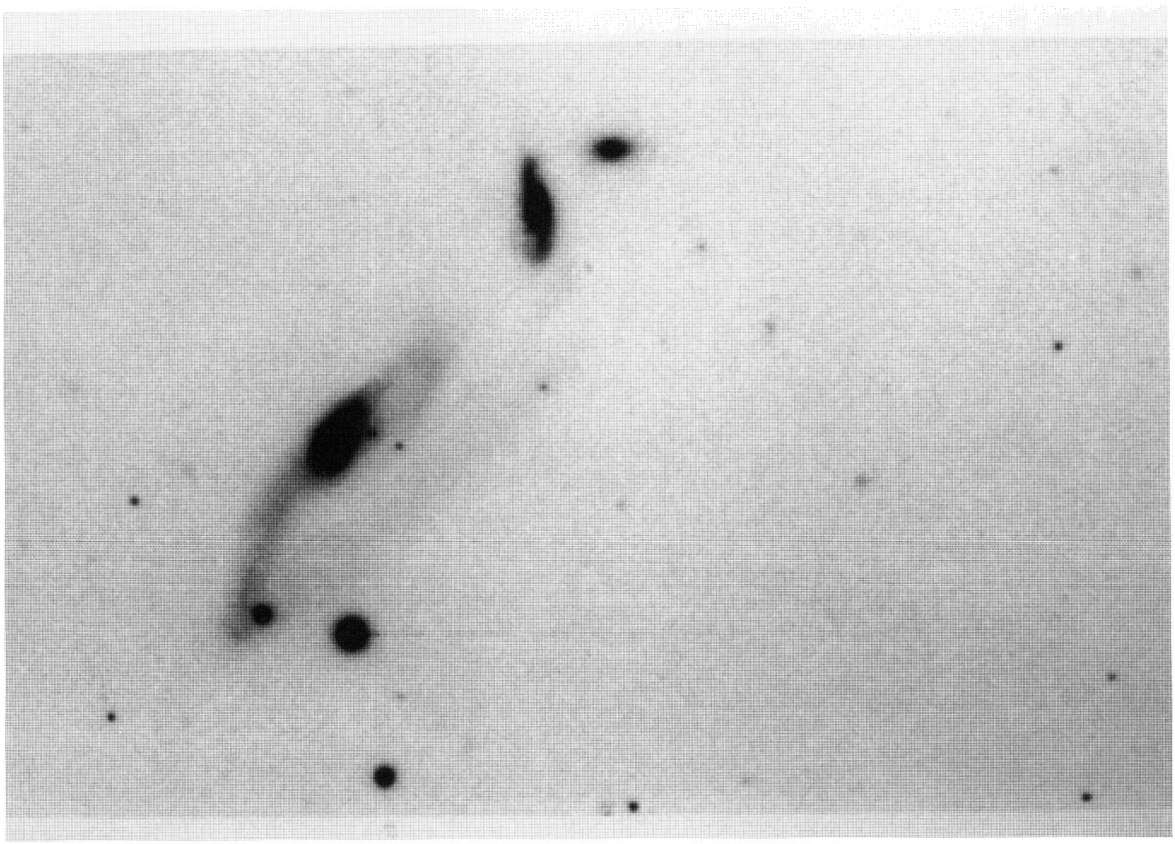
r.a. (1950)	(h m s)	13 23 07.13
dec. (1950)	(° ' ")	-03 35 08.1
galactic longitude	(°)	319.19
galactic latitude	(°)	+57.94
mean redshift		0.0360
total blue magnitude (B_{TC})		13.73
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	25.7
radial velocity dispersion	(km/s)	213.8
crossing time	(Ht_c)	0.0093
mass-to-light ratio	($M_\odot/L_\odot$)	49.0

GALAXY DATA

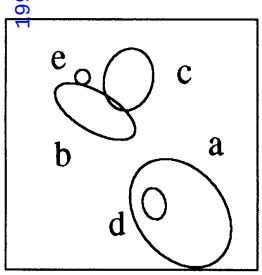
Galaxy:		a	b	c	d
α	(m s)	23 09.9	23 07.6	23 04.2	23 06.8
δ	(' ")	36 15.2	35 35.3	33 17.4	35 24.6
v	(km/s)	10596	10723	6147	11100
Δv	(km/s)	46	32	76	89
T		SBc	Scd	Sd	S0
a	(")	39.90	26.90	20.70	6.20
b	(")	13.40	15.30	17.10	4.10
B_{TC}		14.70	15.84	14.70	17.19
$B-R$		1.48	1.42	0.80	1.42
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					



B



Group 65



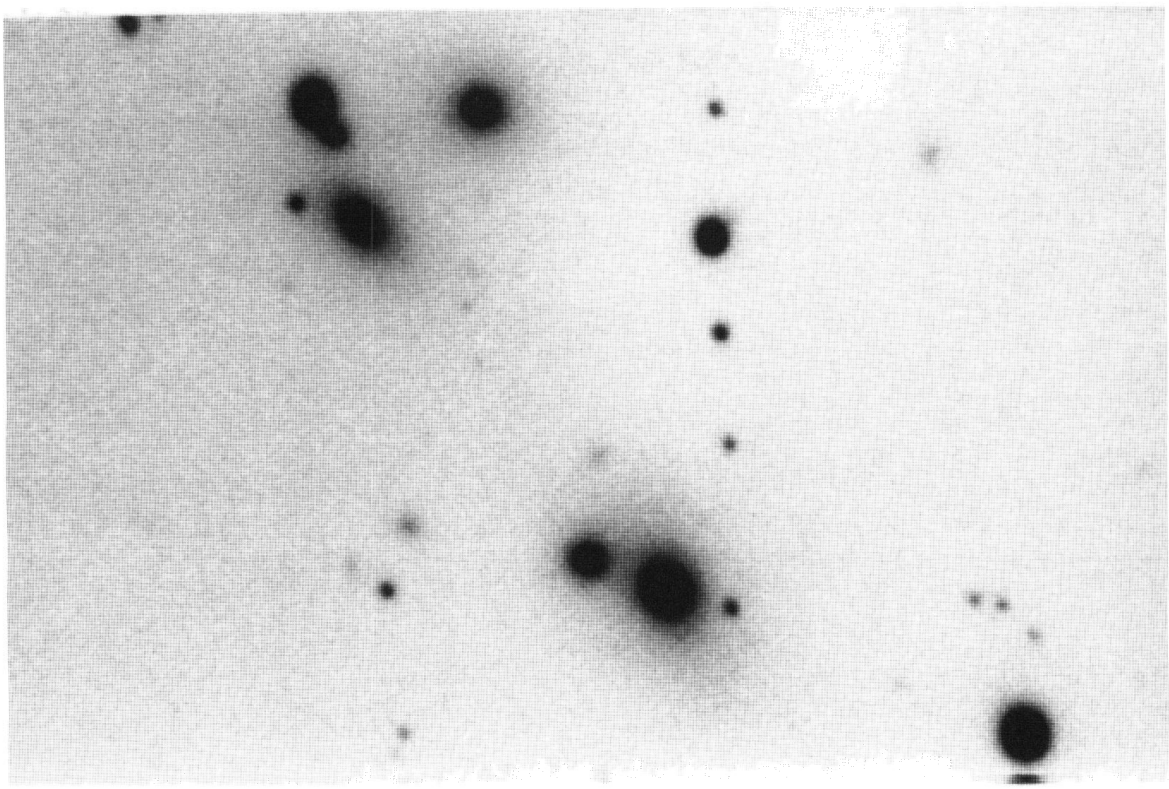
Group 65 is a compact quintet of relatively luminous early-type galaxies. The velocity dispersion of this group is higher than most.

GROUP DATA

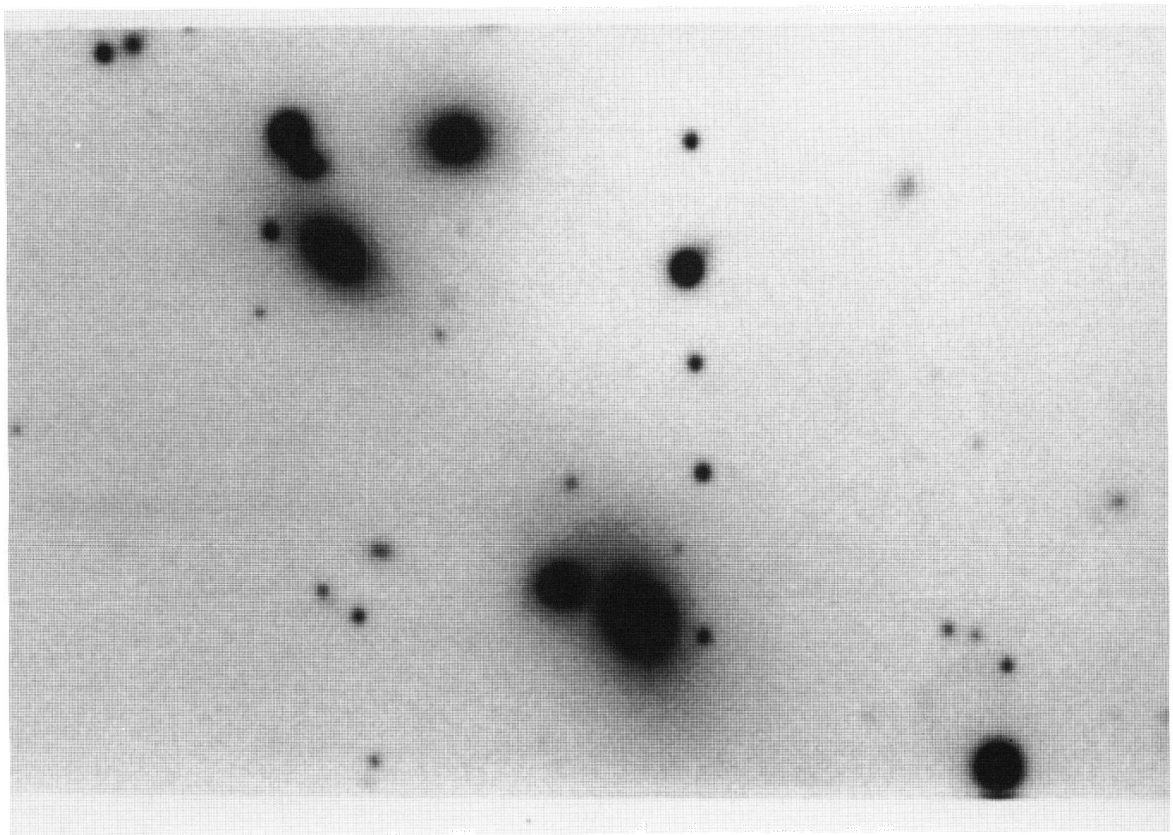
r.a. (1950)	(h m s)	13 27 05.39
dec. (1950)	(° ' ")	-29 14 37.7
galactic longitude	(°)	312.87
galactic latitude	(°)	+32.63
mean redshift		0.0475
total blue magnitude (B_{TC})		12.74
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	45.7
radial velocity dispersion	(km/s)	323.6
crossing time	(Ht_c)	0.0107
mass-to-light ratio	($M_\odot/L_\odot$)	22.9

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	27 03.0	27 06.9	27 05.4	27 04.2	27 07.5
δ	(' ")	15 24.4	14 21.9	14 02.5	15 18.7	14 01.1
v	(km/s)	14105	14700	14243	13733	14405
Δv	(km/s)	44	55	46	27	107
T		E3	S0	E2	E3	E0
a	(")	37.00	27.40	19.00	10.00	4.50
b	(")	26.80	11.90	14.80	7.00	4.50
B_{TC}		13.71	14.54	14.83	14.94	15.05
$B-R$		1.59	1.63	1.66	1.77	1.43
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name						

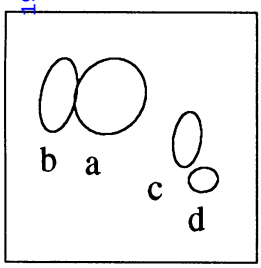


B



R

Group 66



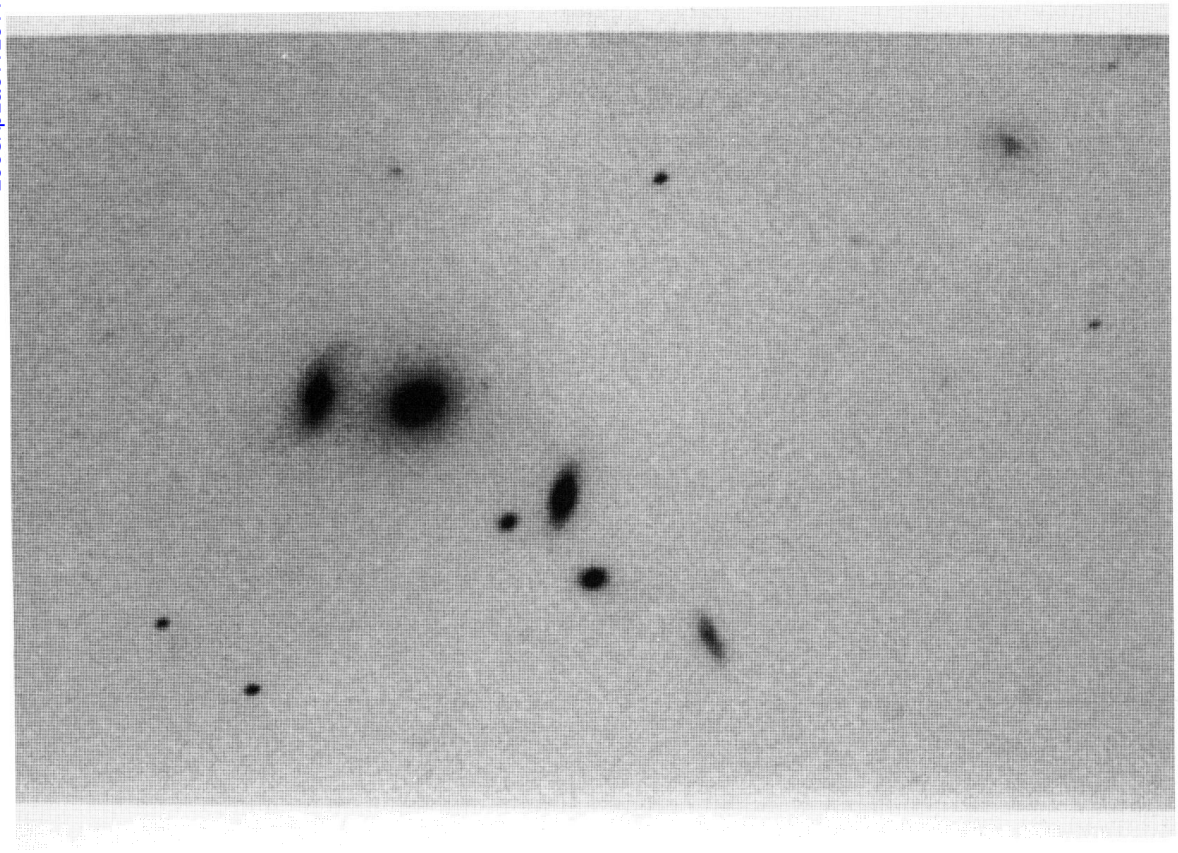
Group 66 is a distant chain of four early-type galaxies, also known as VV 135. A fifth galaxy appears nearby to the northwest and may be dynamically related to the group.

GROUP DATA

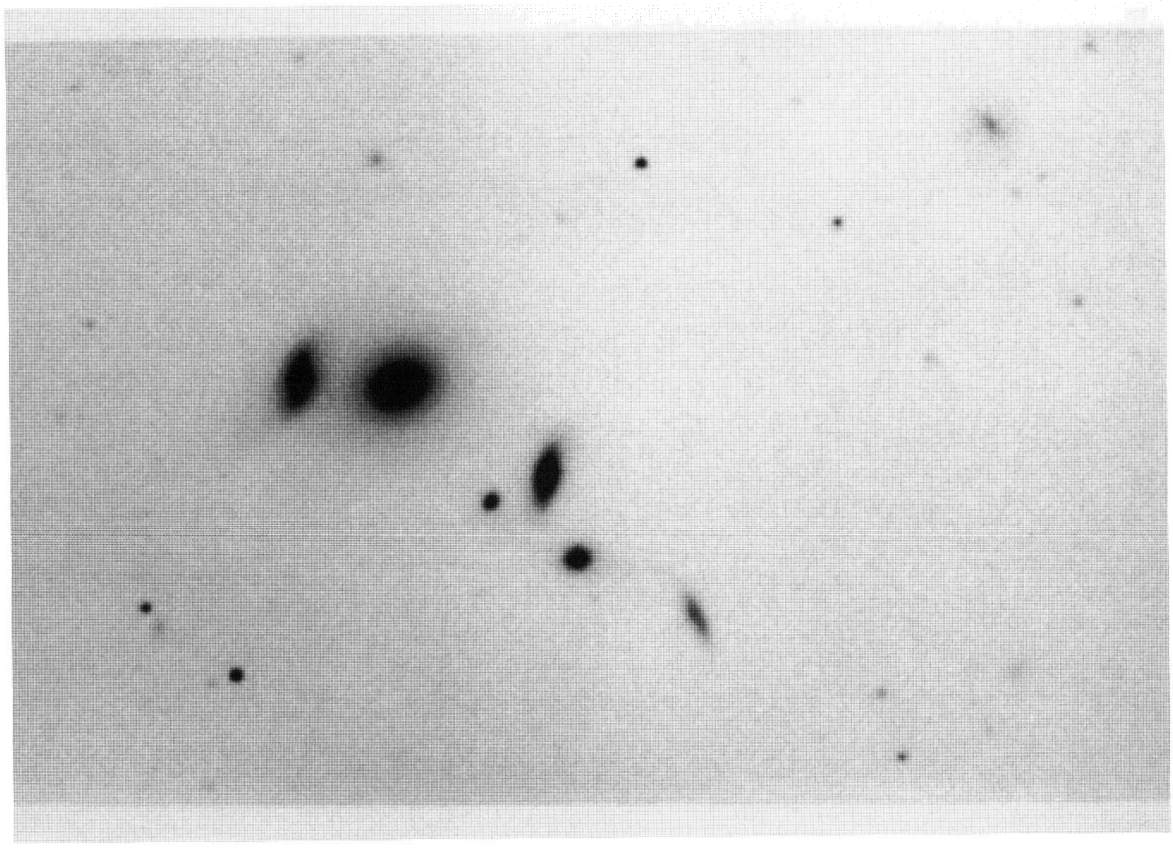
r.a. (1950)	(h m s)	13 36 47.14
dec. (1950)	(° ' ")	+57 33 45.5
galactic longitude	(°)	110.67
galactic latitude	(°)	+58.68
mean redshift		0.0699
total blue magnitude (B_{TC})		14.68
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	32.4
radial velocity dispersion	(km/s)	302.0
crossing time	(Ht_c)	0.0079
mass-to-light ratio	($M_\odot/L_\odot$)	61.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	36 48.4	36 50.6	36 45.2	36 44.5
δ	(' ")	33 56.2	33 56.6	33 41.6	33 27.7
v	(km/s)	20688	21472	20801	20850
Δv	(km/s)	36	64	74	76
T		E1	S0	S0	E2
a	(")	13.40	12.80	9.60	5.00
b	(")	11.60	5.90	4.70	4.20
B_{TC}		15.38	16.50	16.39	17.45
$B-R$		1.78	1.68	1.67	1.76
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

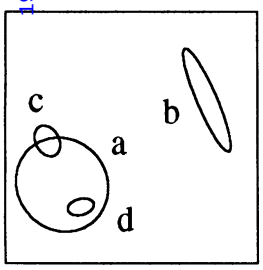


B



R

Group 67



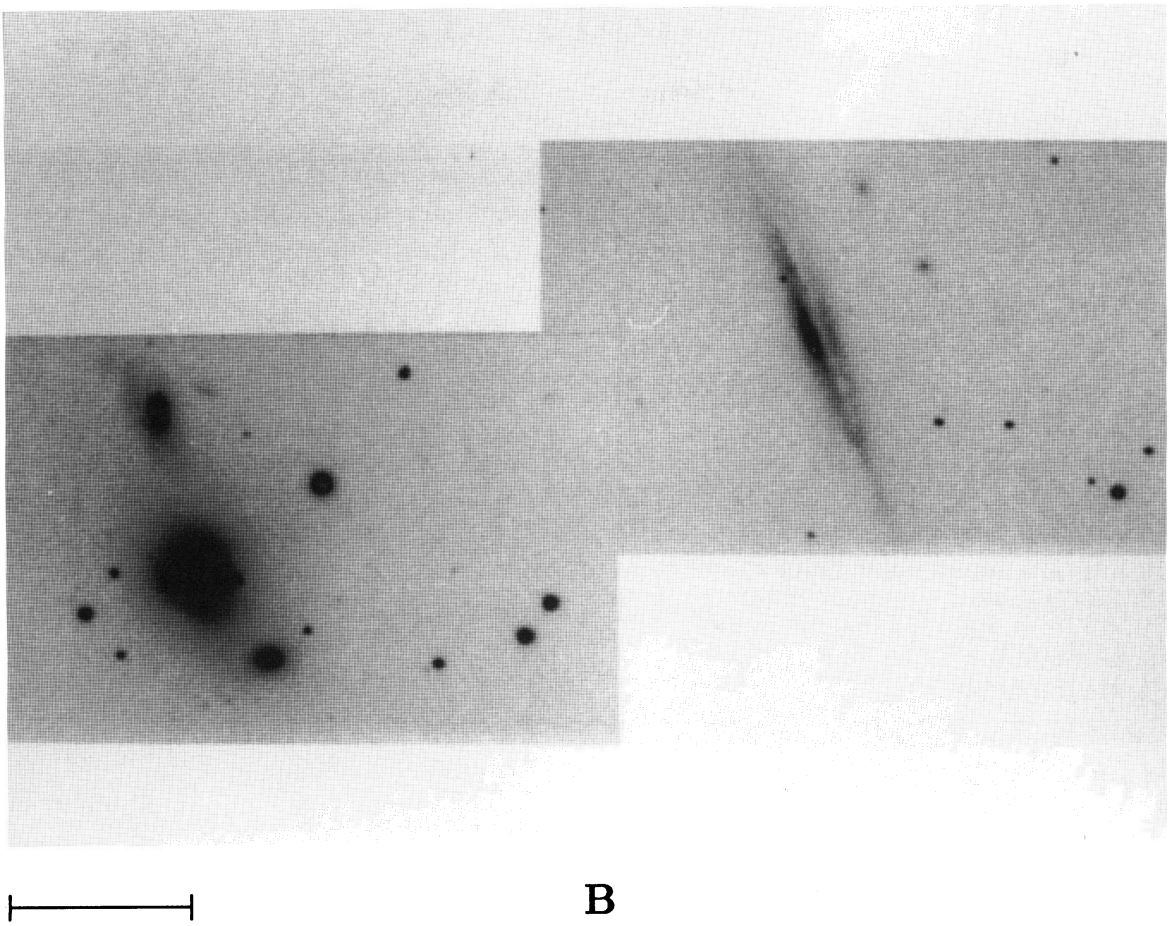
Group 67 contains two dominant galaxies. The brightest of these has two compact companions within its envelope. The brightest of these companions (c) is a radio source. Infrared and radio emission are detected from the bright spiral galaxy (b).

GROUP DATA

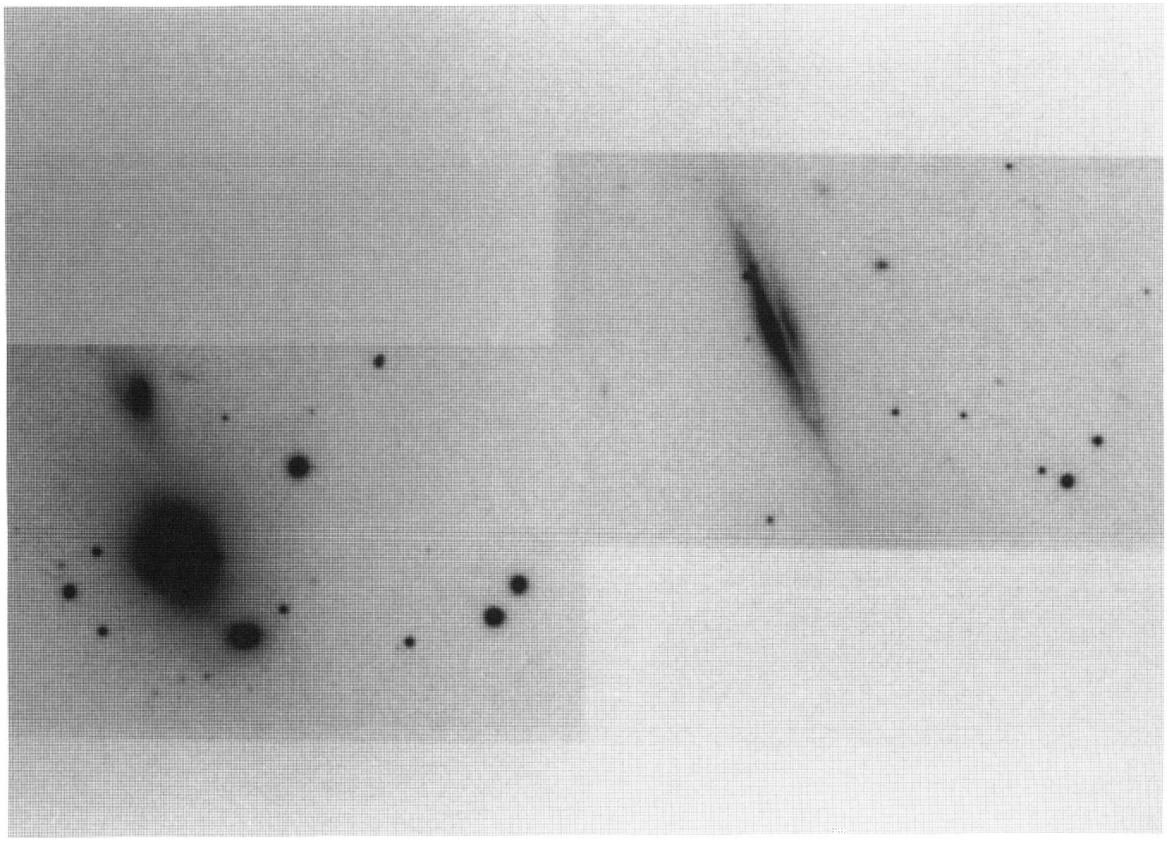
r.a. (1950)	(h m s)	13 46 30.75
dec. (1950)	(° ' ")	-06 58 01.6
galactic longitude	(°)	327.13
galactic latitude	(°)	+52.92
mean redshift		0.0245
total blue magnitude (B_{TC})		12.25
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	49.0
radial velocity dispersion	(km/s)	208.9
crossing time	(Ht_c)	0.0174
mass-to-light ratio	($M_\odot/L_\odot$)	46.8

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	46 33.8	46 22.0	46 35.0	46 32.3
δ	(' ")	58 33.8	68.40	19.90	16.50
v	(km/s)	7262	7644	7430	7071
Δv	(km/s)	26	45	45	43
T		E1	Sc	Scd	S0
a	(")	58.80	68.40	19.90	16.50
b	(")	54.40	12.30	14.40	9.80
B_{TC}		12.74	13.89	15.06	15.25
$B-R$		1.59	1.75	1.30	1.60
$\log F_{60\mu}$	(Jy)		0.86		
$\log F_{100\mu}$	(Jy)		2.80		
$\log F_{20cm}$	(mJy)		8.72	11.55	
name					

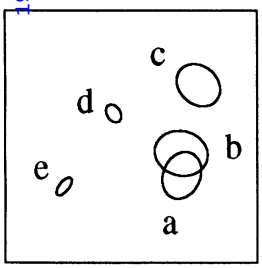


B



R

Group 68



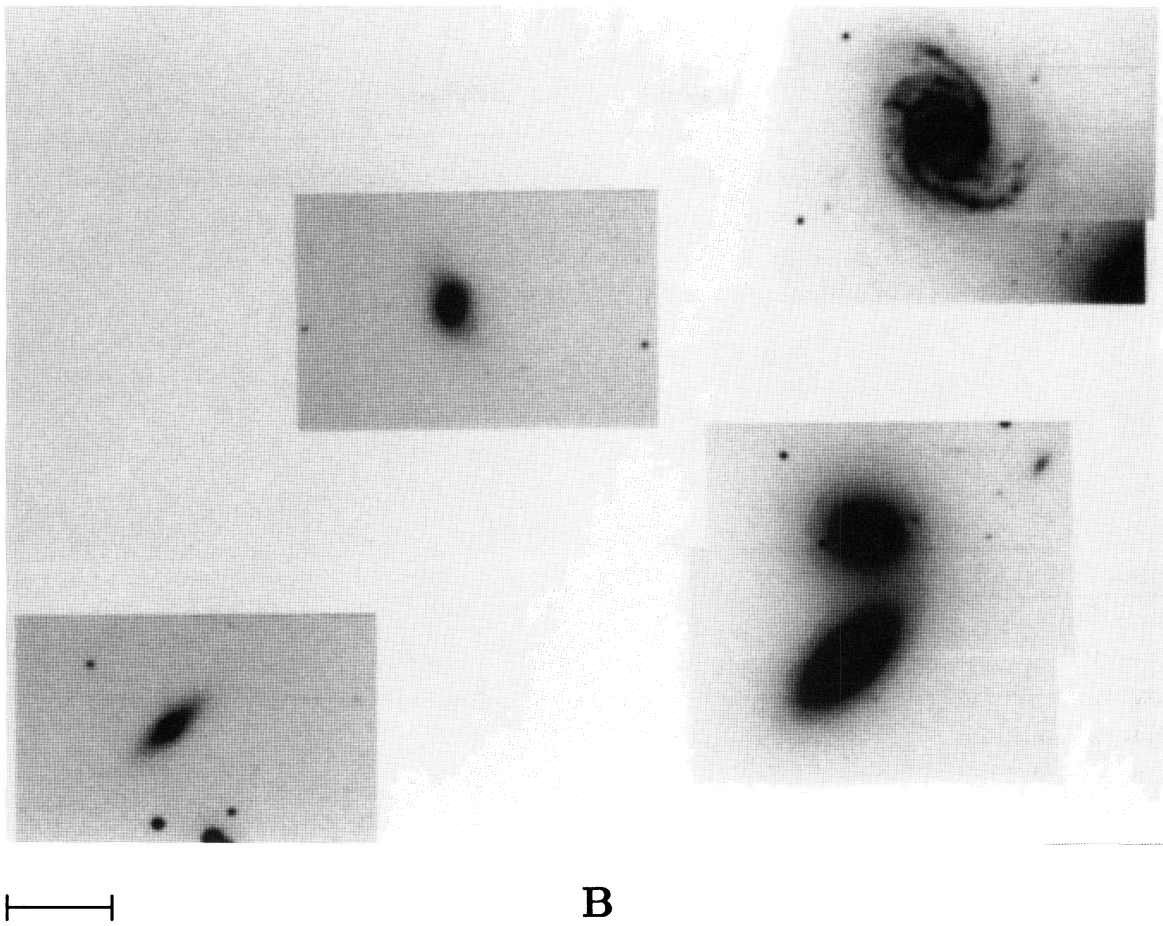
This nearby group contains three large galaxies all of which are radio sources: two overlapping early-type galaxies and a distorted spiral galaxy which is also an infrared source. Two fainter galaxies also show signs of interaction.

GROUP DATA

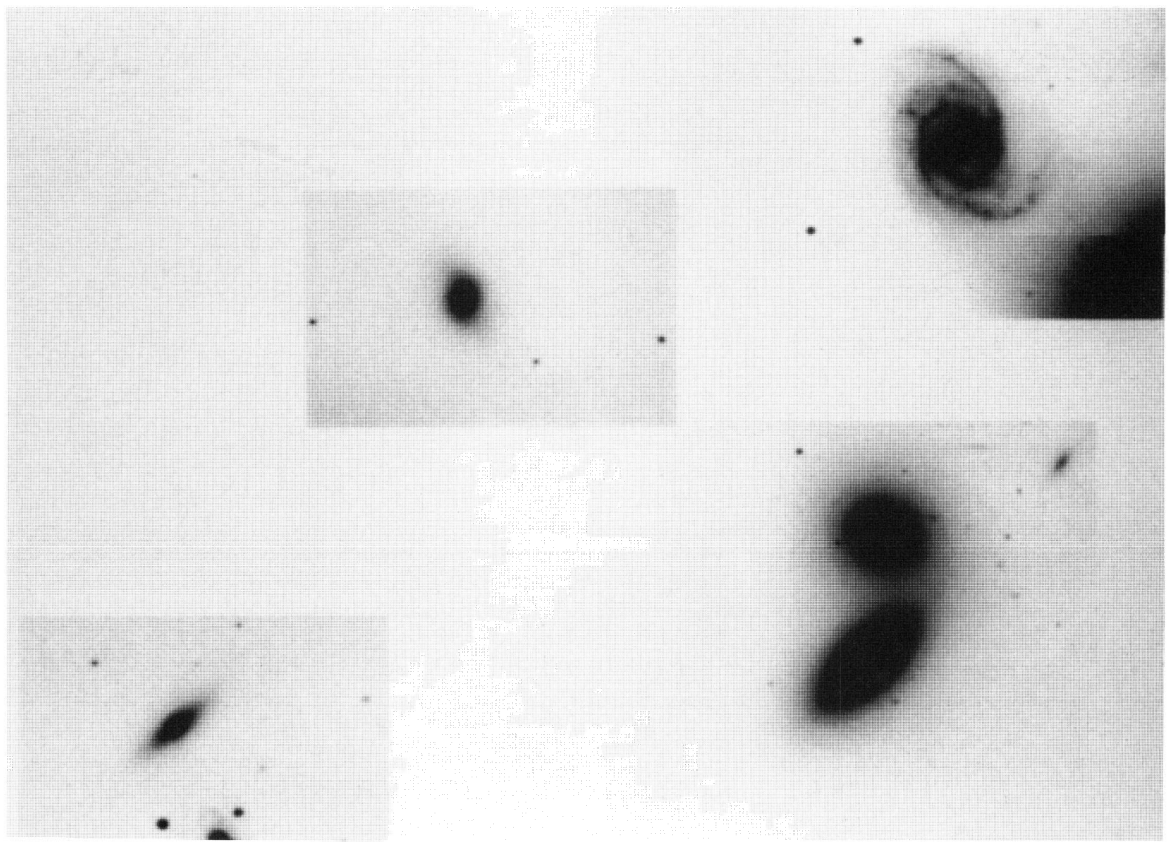
r.a. (1950)	(h m s)	13 51 29.15
dec. (1950)	(° ' ")	+40 33 26.9
galactic longitude	(°)	82.62
galactic latitude	(°)	+71.59
median redshift		0.0080
total blue magnitude (B_{TC})		10.68
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	33.1
radial velocity dispersion	(km/s)	154.9
crossing time	(Ht_c)	0.0162
mass-to-light ratio	($M_\odot/L_\odot$)	30.2

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	51 19.6	51 19.7	51 14.8	51 38.8	51 52.87
δ	(' ")	31 42.5	32 52.8	36 32.0	35 00.5	31 06.8
v	(km/s)	2162	2635	2313	2408	2401
Δv	(km/s)	27	23	38	29	27
T		S0	E2	SBbc	E3	S0
a	(")	77.40	86.40	76.70	31.10	35.20
b	(")	59.90	71.10	61.90	21.80	15.50
B_{TC}		11.84	12.24	11.93	13.73	14.22
$B-R$		1.63	1.63	1.10	1.30	1.40
$\log F_{60\mu}$	(Jy)			2.24		
$\log F_{100\mu}$	(Jy)			8.25		
$\log F_{20cm}$	(mJy)	38.48	6.65	1.84		
name		N5353	N5354	N5350	N5355	N5358

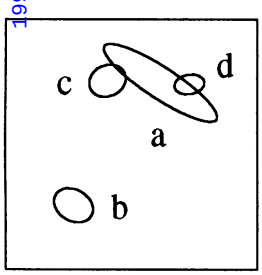


B



R

Group 69



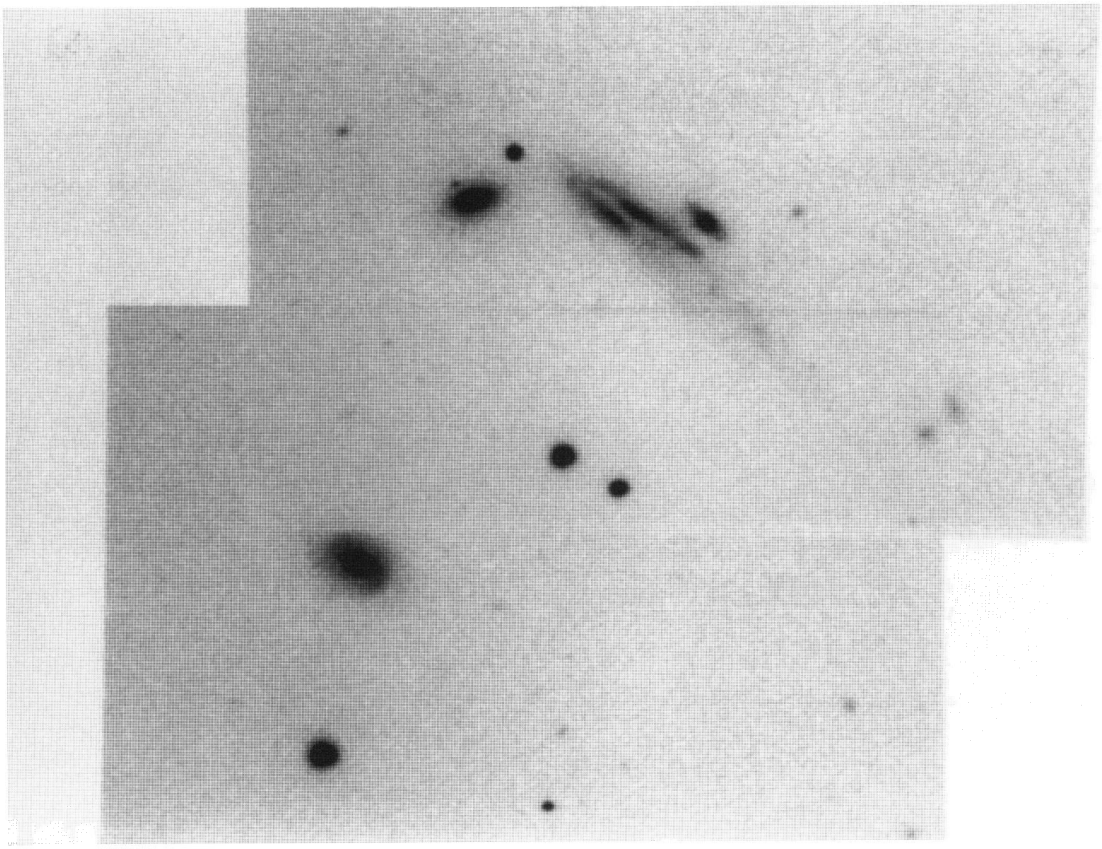
This group, VV 281, is a compact quartet of spiral and S0 galaxies. It is surrounded by many galaxies of similar magnitude and is likely part of a larger cluster. Two galaxies (a and b) are radio sources and one (b) is an infrared source.

GROUP DATA

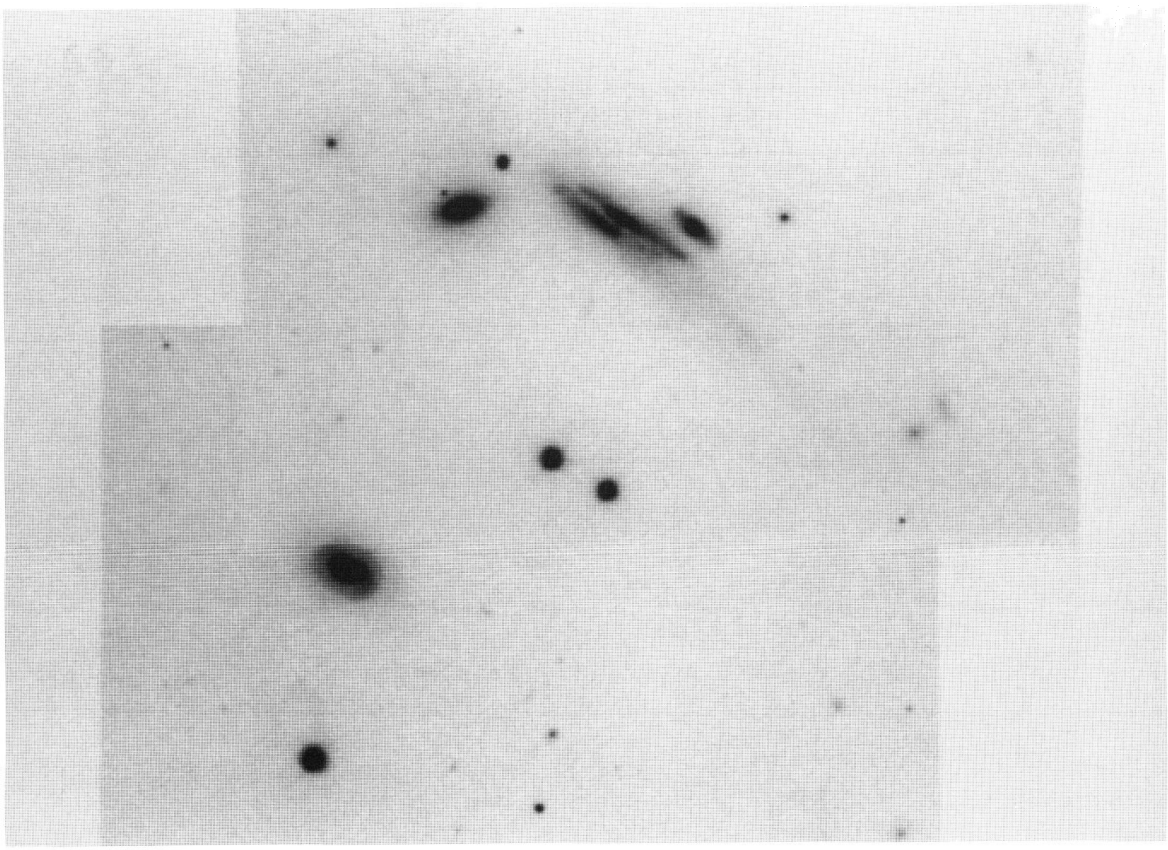
r.a. (1950)	(h m s)	13 53 12.58
dec. (1950)	(° ' ")	+25 18 44.0
galactic longitude	(°)	28.38
galactic latitude	(°)	+75.48
mean redshift		0.0294
total blue magnitude (B_{TC})		13.78
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	30.2
radial velocity dispersion	(km/s)	223.9
crossing time	(Ht_c)	0.0102
mass-to-light ratio	($M_\odot/L_\odot$)	57.5

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	53 11.1	53 15.7	53 13.9	53 09.6
δ	(' ")	19 05.8	17 38.2	19 07.2	19 04.7
v	(km/s)	8856	8707	8546	9149
Δv	(km/s)	48	36	44	55
T		Sc	SBb	S0	SB0
a	(")	47.50	14.80	13.40	10.80
b	(")	11.10	11.30	11.00	7.00
B_{TC}		14.94	15.59	14.94	16.06
$B-R$		1.57	1.49	1.45	1.51
$\log F_{60\mu}$	(Jy)		2.15		
$\log F_{100\mu}$	(Jy)		2.83		
$\log F_{20cm}$	(mJy)	1.33	4.04		
name		U8842		U8842	U8842

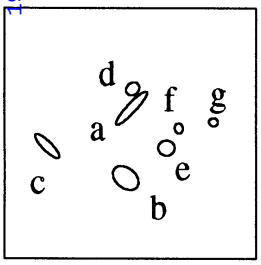


B



R

Group 70



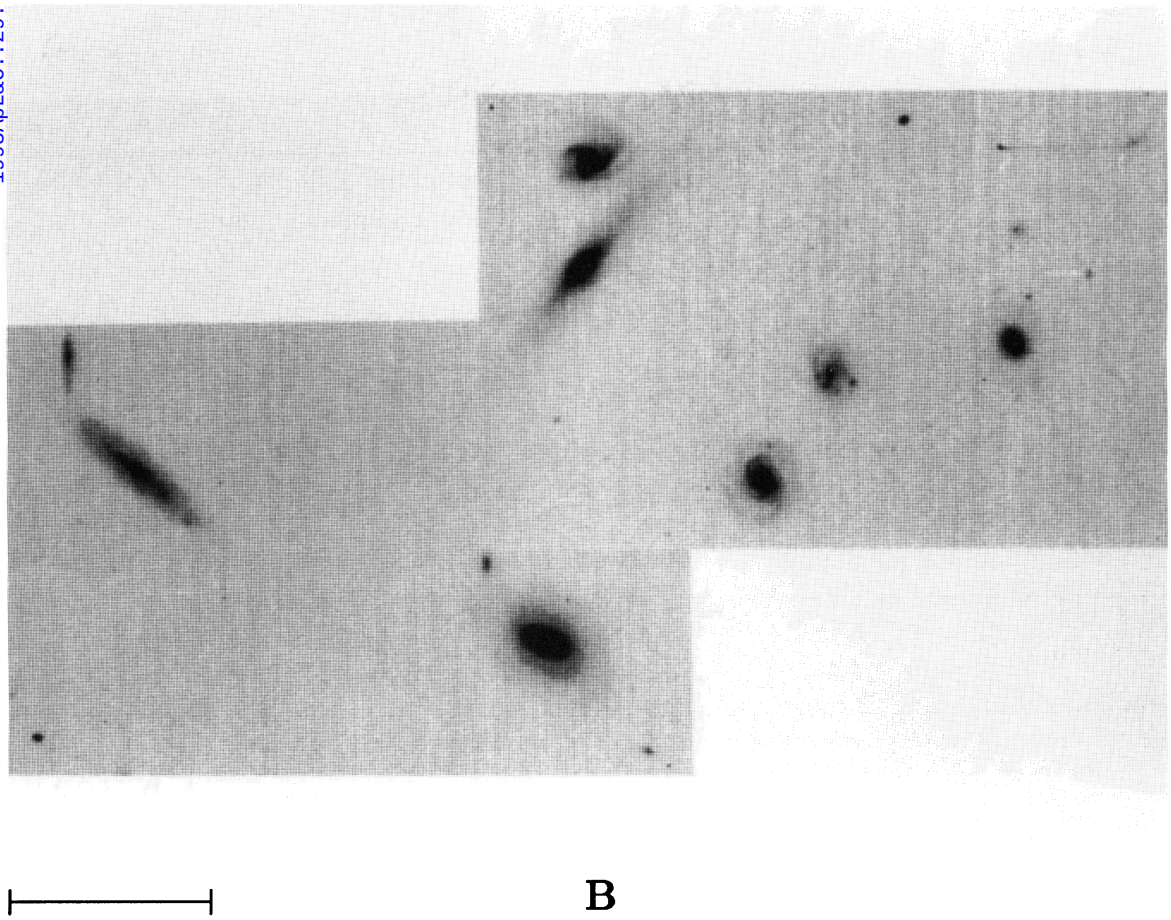
Group 70 appears to be two overlapping groups, a distant quartet and a nearby triplet. The dynamical properties given below refer to the quartet.

GROUP DATA

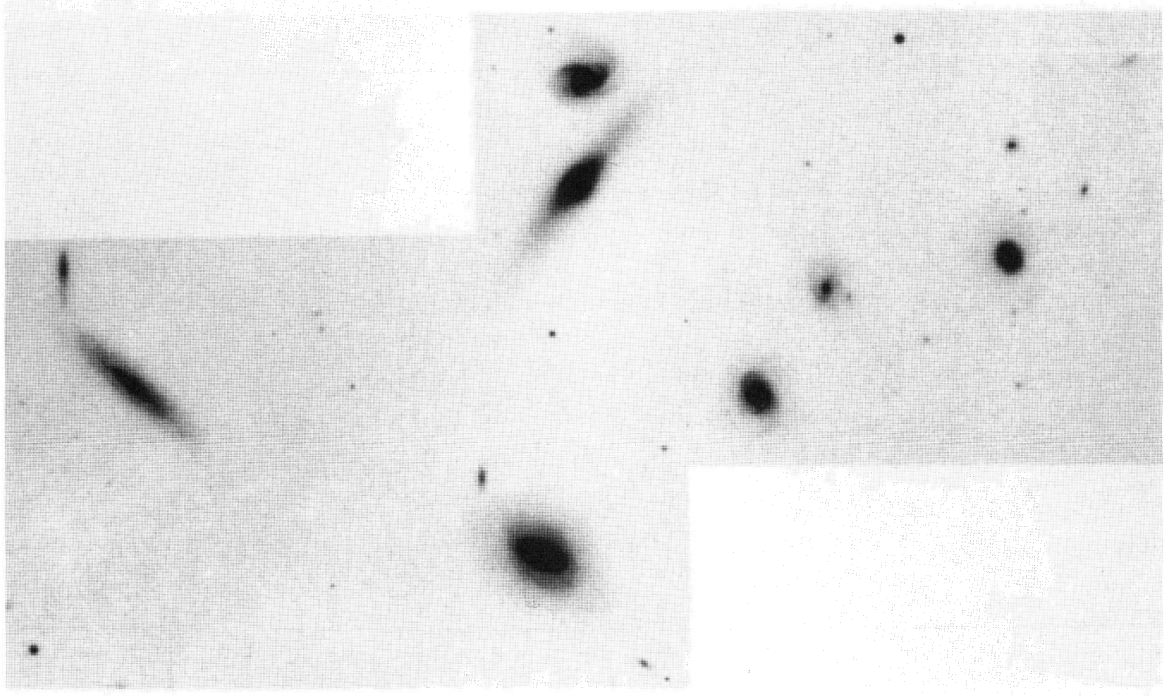
r.a. (1950)	(h m s)	14 01 57.84
dec. (1950)	(° ' ")	+33 33 58.9
galactic longitude	(°)	58.91
galactic latitude	(°)	+73.14
mean redshift		0.0636
total blue magnitude (B_{TC})		13.15
number of galaxies		7
number of accordant galaxies		4
median galaxy separation	(kpc)	72.4
radial velocity dispersion	(km/s)	144.5
crossing time	(Ht_c)	0.0102
mass-to-light ratio	($M_\odot/L_\odot$)	57.5

GALAXY DATA

Galaxy:		a	b	c	d	e	f	
α	(m s)	01 59.2	01 59.9	02 09.6	01 59.0	01 54.9	01 53.3	01 49.
δ	(' ")	34 34.3	32 47.2	33 36.2	35 03.9	33 33.7	34 03.7	34 13.
v	(km/s)	8238	8198	8079	18846	19117	1924319010	
Δv	(km/s)	25	47	48	49	55	130	9
T		S0a	SBa	Sbc	Sc	Sbc	SBb	S
a	(")	35.00	22.70	25.60	11.10	12.80	7.90	7.2
b	(")	7.00	15.50	7.30	9.10	11.90	6.40	6.4
B_{TC}		14.50	14.75	15.03	15.42	15.91	16.40	16.3
$B-R$		1.60	1.51	1.27	1.38	1.24	0.88	1.3
$\log F_{60\mu}$	(Jy)							
$\log F_{100\mu}$	(Jy)							
$\log F_{20cm}$	(mJy)							
name		I4371	I4369		I4370			

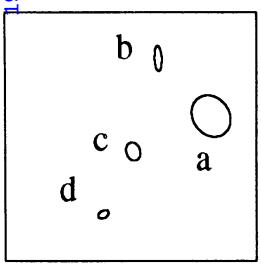


B



R

Group 71



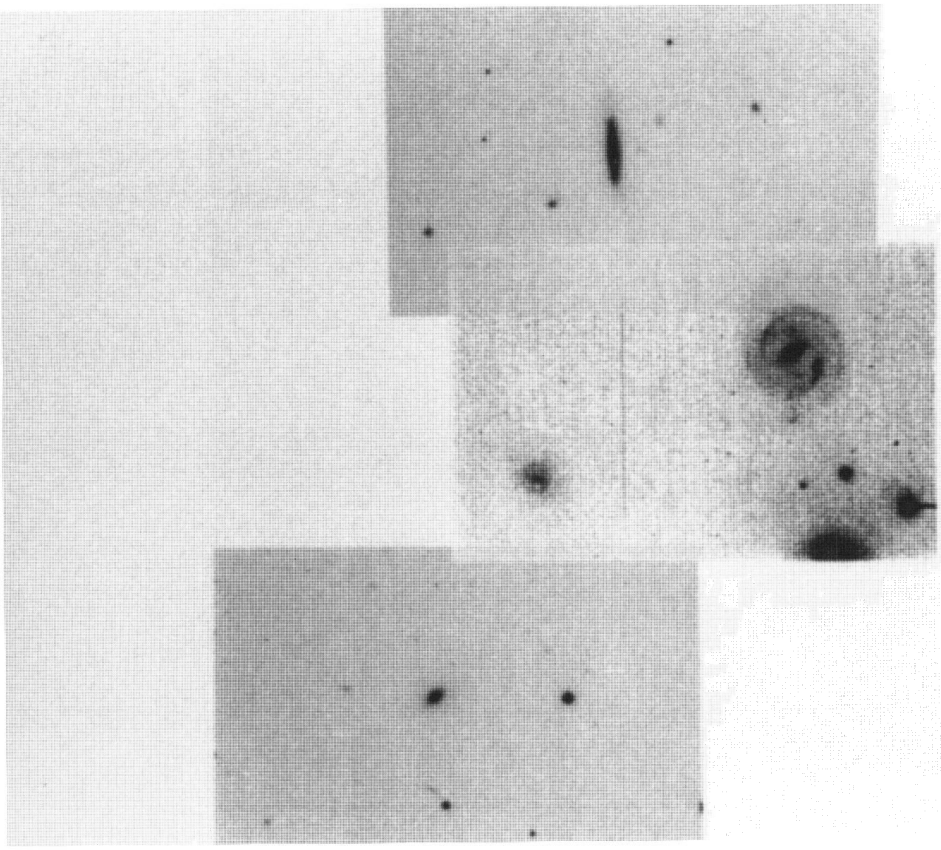
Group 71 consists of a triplet of spiral galaxies plus a small high-redshift member. Galaxy b is a radio and infrared source. The triplet has quite a high velocity dispersion.

GROUP DATA

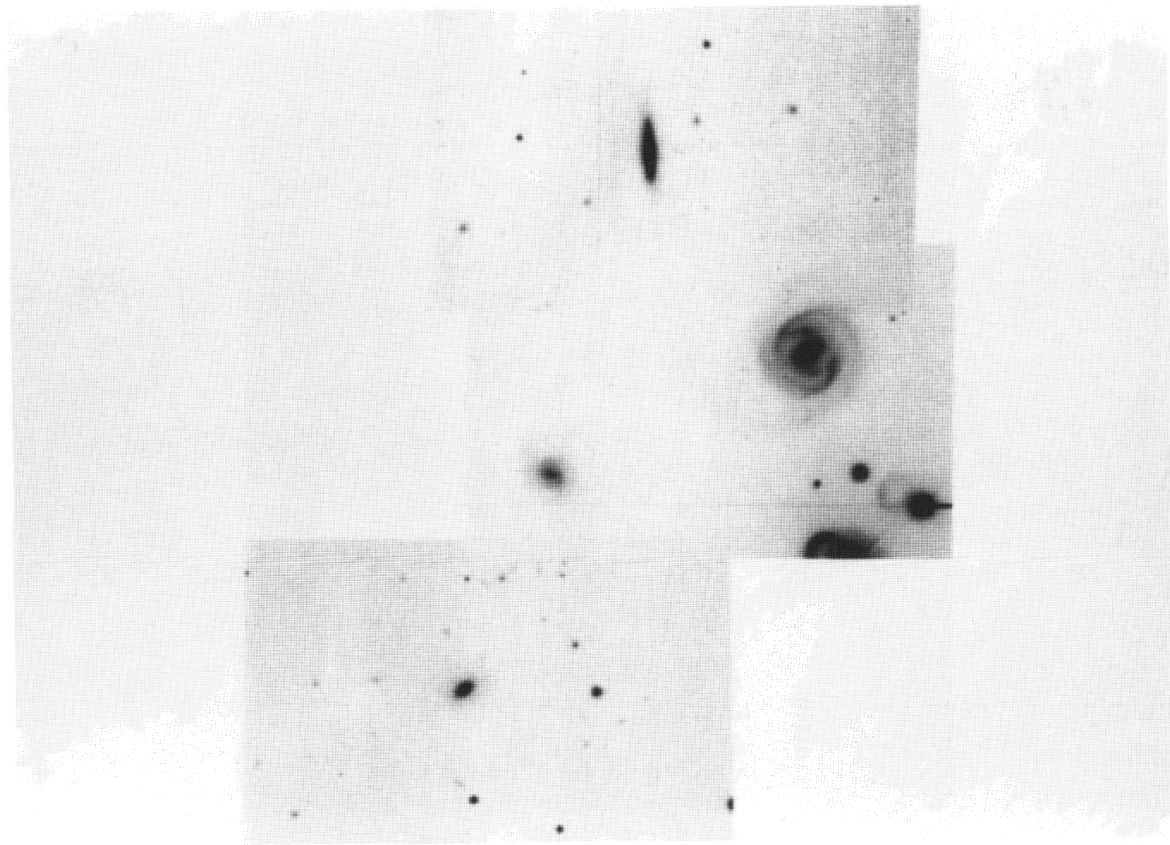
r.a. (1950)	(h m s)	14 08 46.69
dec. (1950)	(° ' ")	+25 43 26.3
galactic longitude	(°)	32.17
galactic latitude	(°)	+72.10
mean redshift		0.0301
total blue magnitude (B_{TC})		13.25
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	50.1
radial velocity dispersion	(km/s)	416.9
crossing time	(Ht_c)	0.0091
mass-to-light ratio	($M_\odot/L_\odot$)	323.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	08 40.5	08 46.0	08 48.6	08 51.7
δ	(' ")	43 53.7	45 16.1	43 02.5	41 32.9
v	(km/s)	9320	9335	8450	20590
Δv	(km/s)	17	65	76	103
T		SBc	Sb	SBc	S0
a	(")	31.50	18.10	13.70	7.90
b	(")	25.80	5.40	9.90	5.40
B_{TC}		13.75	14.90	15.56	16.92
$B-R$		1.27	1.33	0.97	1.69
$\log F_{60\mu}$	(Jy)		1.54		
$\log F_{100\mu}$	(Jy)		2.94		
$\log F_{20cm}$	(mJy)		5.40		
name		I4381	I4382		

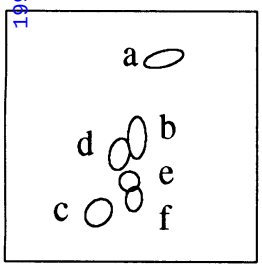


B



R

Group 72



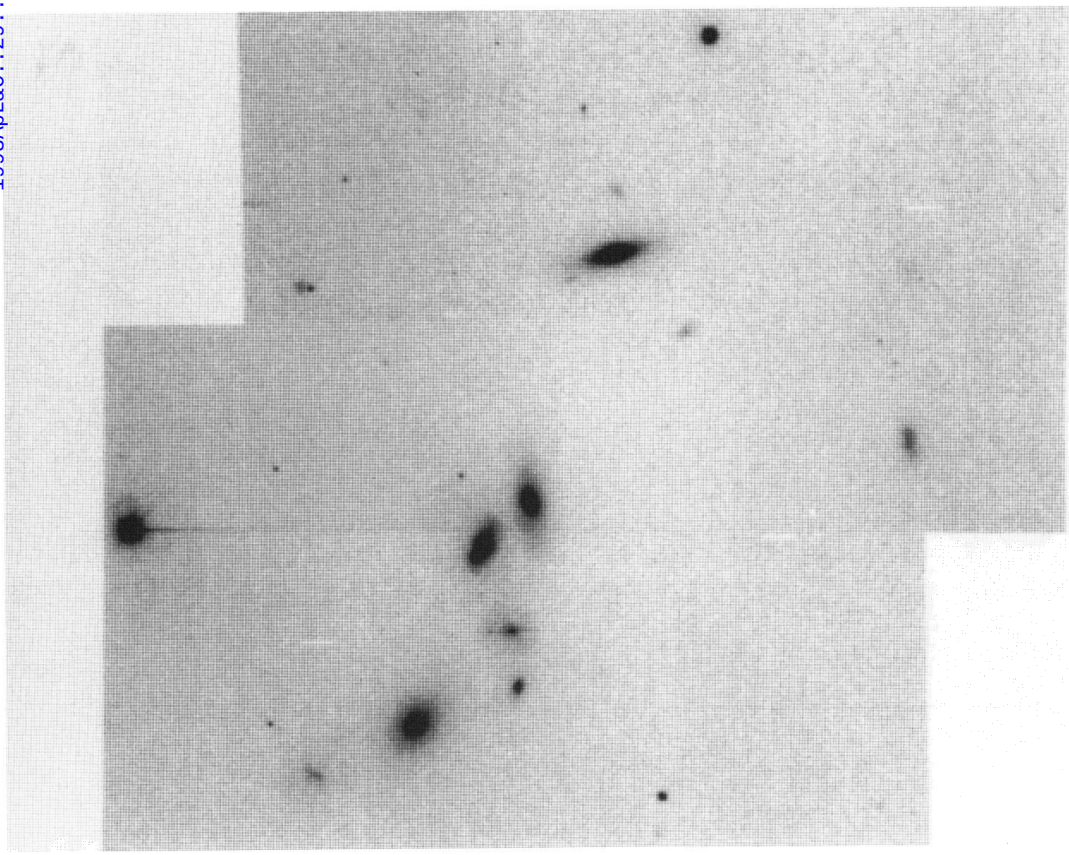
This group (Arp 328, VV 165) contains four galaxies with accordant redshifts. A fifth galaxy (f) has a velocity 1392 km s^{-1} above the median and has been excluded from the dynamical analysis.

GROUP DATA

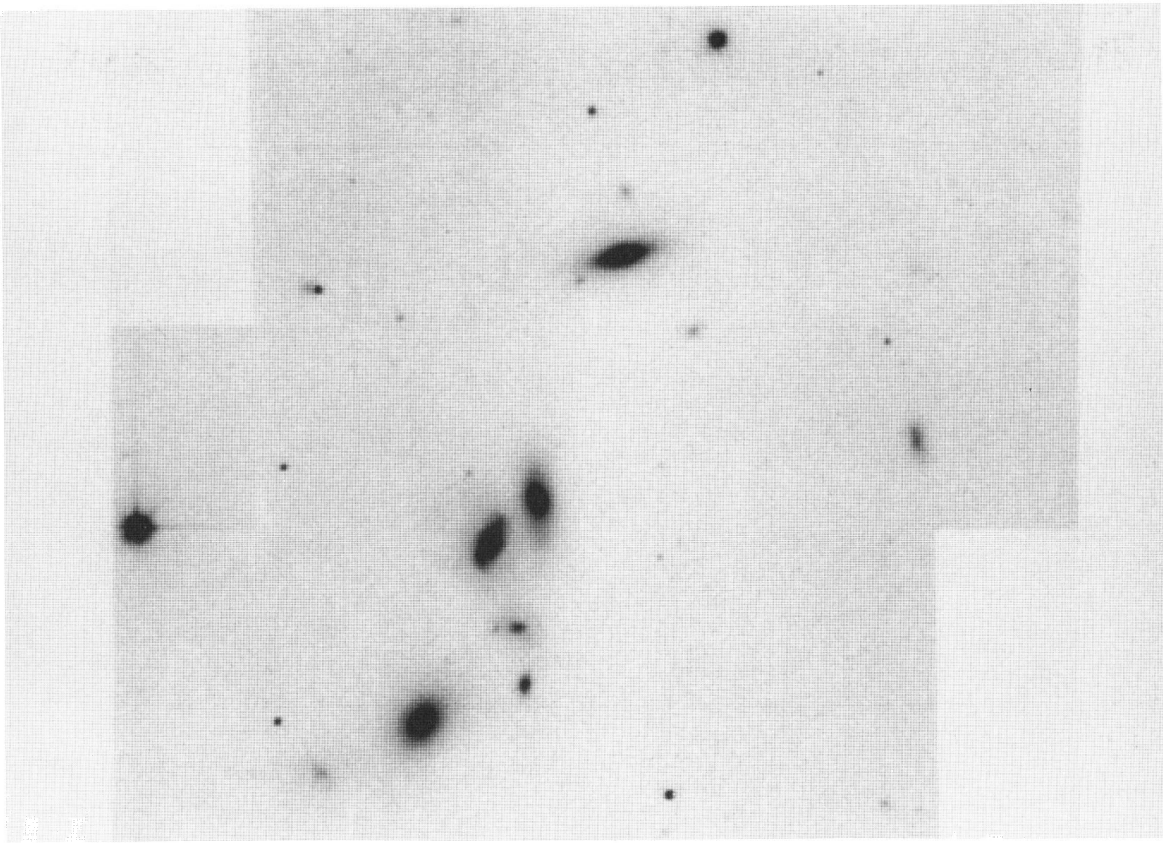
r.a. (1950)	(h m s)	14 45 36.90
dec. (1950)	(° ' ")	+19 15 50.2
galactic longitude	(°)	22.35
galactic latitude	(°)	+62.10
mean redshift		0.0421
total blue magnitude (B_{TC})		13.29
number of galaxies		6
number of accordant galaxies		4
median galaxy separation	(kpc)	35.5
radial velocity dispersion	(km/s)	263.0
crossing time	(Ht_c)	0.0100
mass-to-light ratio	($M_\odot/L_\odot$)	43.7

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	45 35.2	45 36.6	45 38.6	45 37.5	45 37.0	45 36.7
δ	(' ")	17 04.3	16 04.7	15 09.0	15 52.3	15 32.1	15 19.0
v	(km/s)	12506	12356	13062	12558	24050	13950
Δv	(km/s)	36	38	40	45	288	103
T		Sa	S0	E2	SB0	Scd	S0
a	(")	15.10	15.70	11.10	12.00	7.40	9.10
b	(")	6.00	6.70	8.80	7.40	7.40	6.00
B_{TC}		13.86	15.48	15.47	15.64	17.80	17.93
$B-R$		1.66	.57	1.54	1.86	1.19	1.41
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)						
name			U9532				

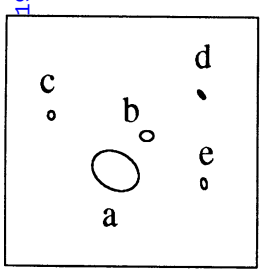


B



R

Group 73



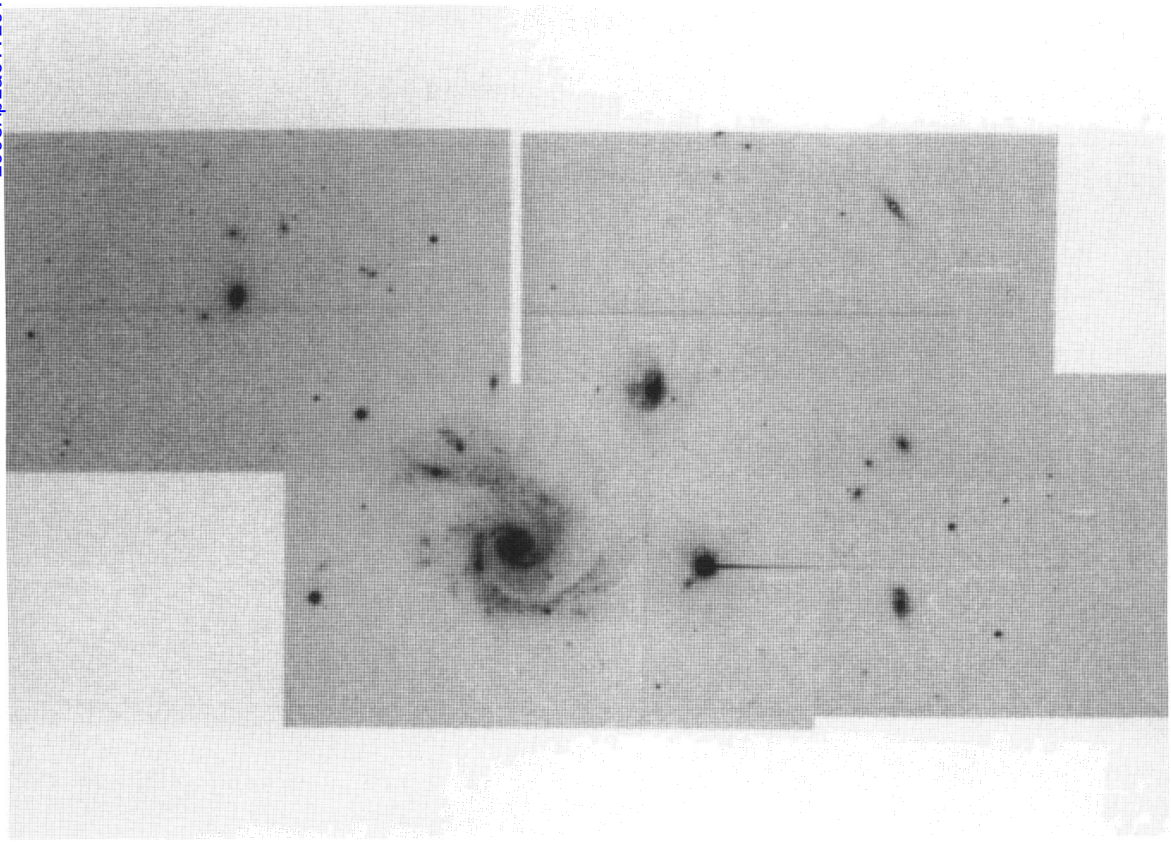
Group 73 (Arp 42, VV 7) consists of a bright spiral galaxy, with detected radio and infrared emission, and several small companions. All the companions have higher redshifts, and three of them form an accordant triplet. The dynamical properties of the triplet are presented below.

GROUP DATA

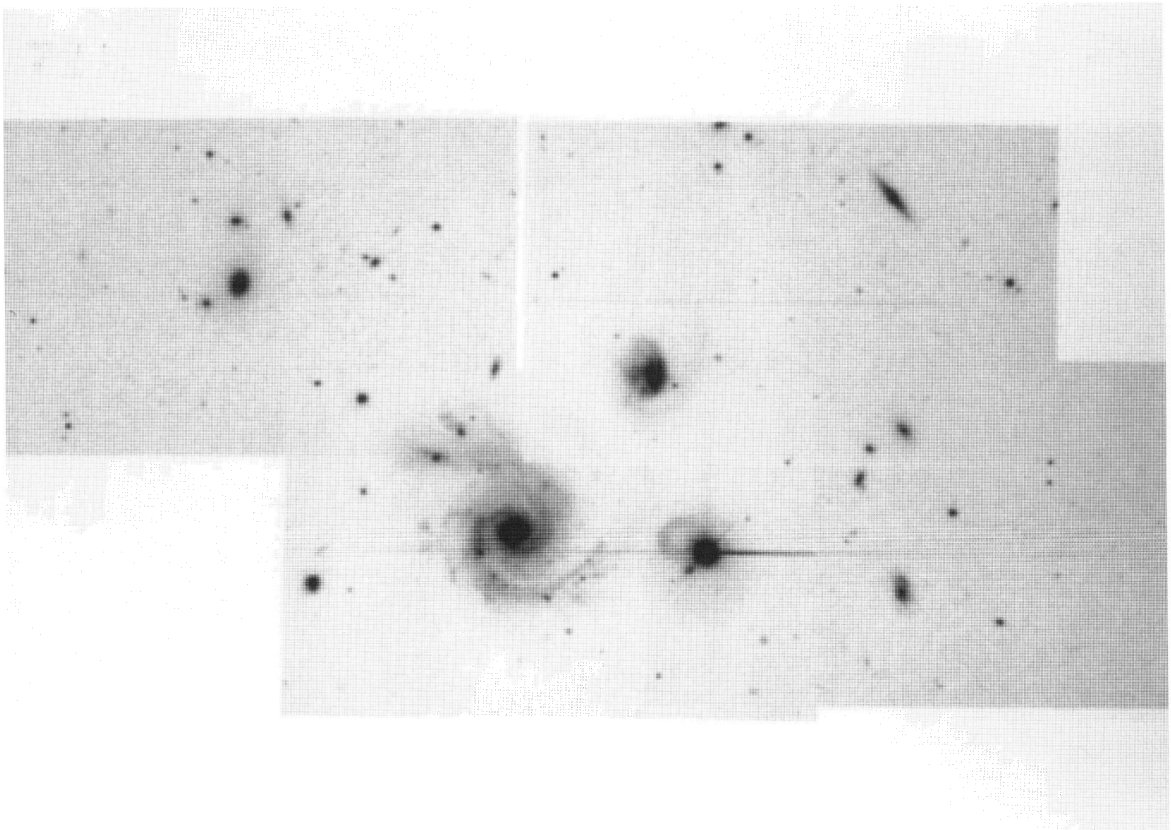
r.a. (1950)	(h m s)	15 00 25.64
dec. (1950)	(° ' ")	+23 32 32.8
galactic longitude	(°)	33.08
galactic latitude	(°)	+60.17
mean redshift		0.0449
total blue magnitude (B_{TC})		13.13
number of galaxies		5
number of accordant galaxies		3
median galaxy separation	(kpc)	100.0
radial velocity dispersion	(km/s)	123.0
crossing time	(Ht_c)	0.0955
mass-to-light ratio	($M_\odot/L_\odot$)	93.3

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	00 29.1	00 25.3	00 37.0	00 18.7	00 18.3
δ	(' ")	31 40.5	32 39.7	33 13.5	33 50.1	31 20.0
v	(km/s)	5728	13600	13300	13480	28500
Δv	(km/s)	43	107	75	103	109
T		Scd	Im	S0	Sb	Sd
a	(")	41.50	11.40	7.20	9.40	9.10
b	(")	30.80	8.70	5.90	3.00	5.40
B_{TC}		13.30	16.22	16.63	17.55	17.07
$B-R$		1.13	2.11	1.70	2.25	1.20
$\log F_{60\mu}$	(Jy)	0.82				
$\log F_{100\mu}$	(Jy)	2.56				
$\log F_{20cm}$	(mJy)	0.40				
name		N5829				

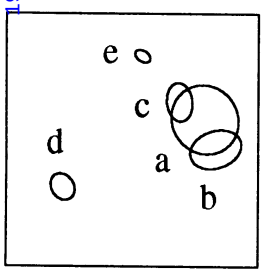


B



R

Group 74



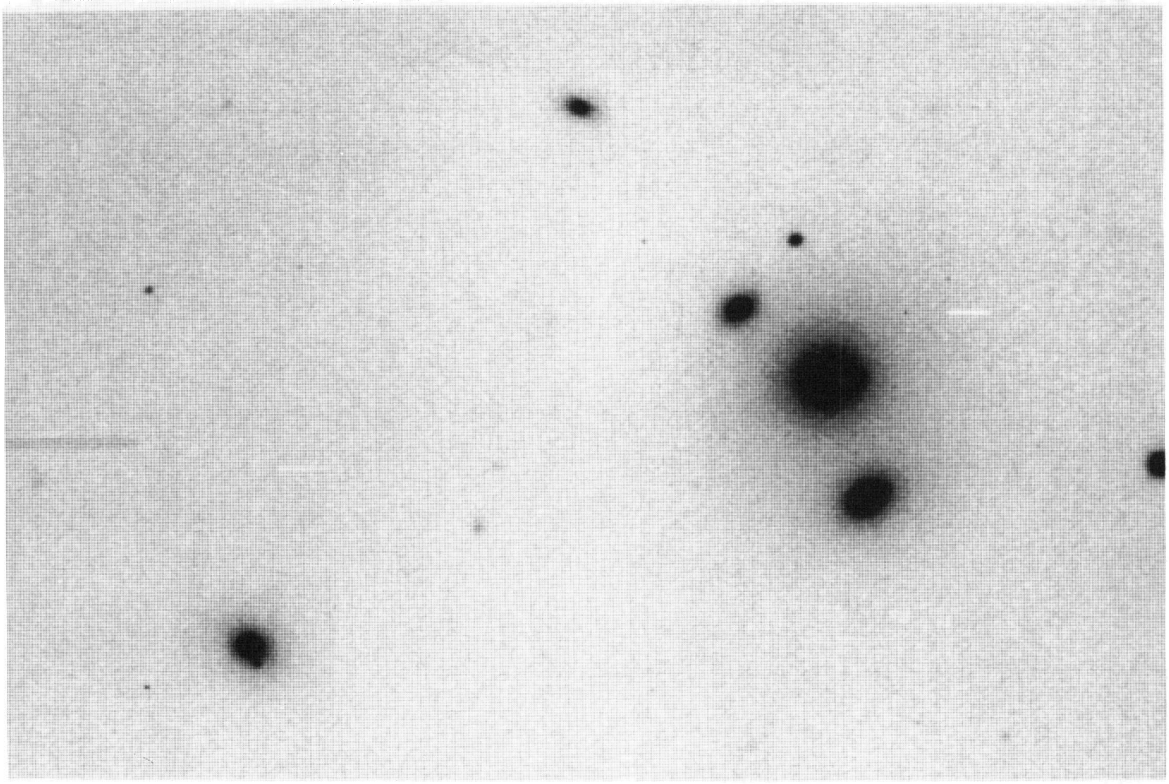
Group 74 (VV 139) is a quintet containing a dominant elliptical galaxy with two very close companions. The elliptical galaxy is a radio source. A galaxy of comparable magnitude is found in the vicinity of the group, to the southwest.

GROUP DATA

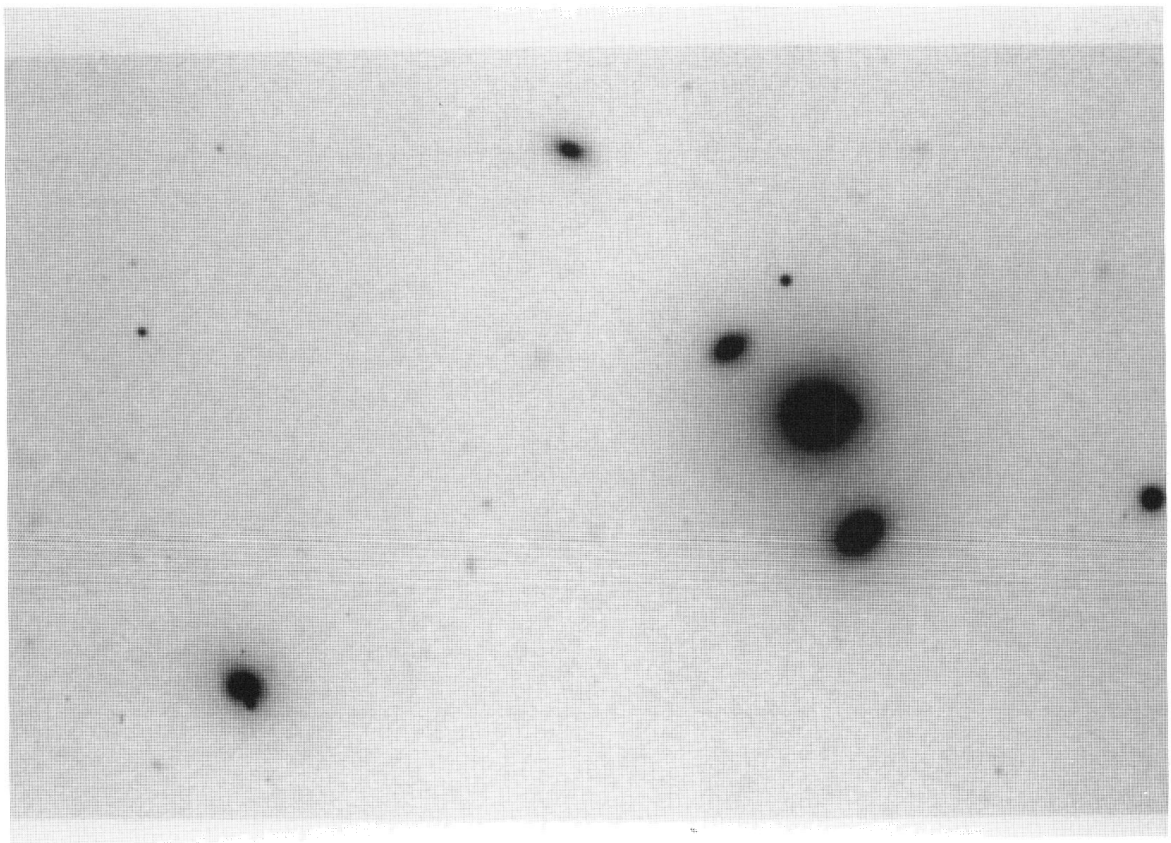
r.a. (1950)	(h m s)	15 17 12.89
dec. (1950)	(° ' ")	+21 04 31.9
galactic longitude	(°)	30.16
galactic latitude	(°)	+55.75
mean redshift		0.0399
total blue magnitude (B_{TC})		13.48
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	38.9
radial velocity dispersion	(km/s)	316.2
crossing time	(Ht_c)	0.0093
mass-to-light ratio	($M_\odot/L_\odot$)	97.7

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	17 10.7	17 10.2	17 12.0	17 17.8	17 13.8
δ	(' ")	04 34.1	04 13.4	04 46.3	03 47.0	05 18.5
v	(km/s)	12255	12110	12266	11681	11489
Δv	(km/s)	30	43	43	42	97
T		E1	E3	S0	E2	S0
a	(")	24.70	18.50	13.50	9.80	5.90
b	(")	23.00	12.90	9.00	7.90	3.80
B_{TC}		14.06	15.07	16.10	16.32	17.80
$B-R$		1.90	1.88	1.83	1.85	1.79
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)	14.76				
name						

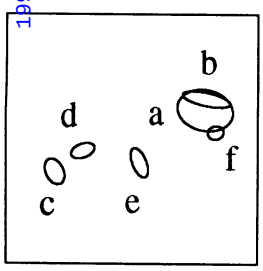


B



R

Group 75



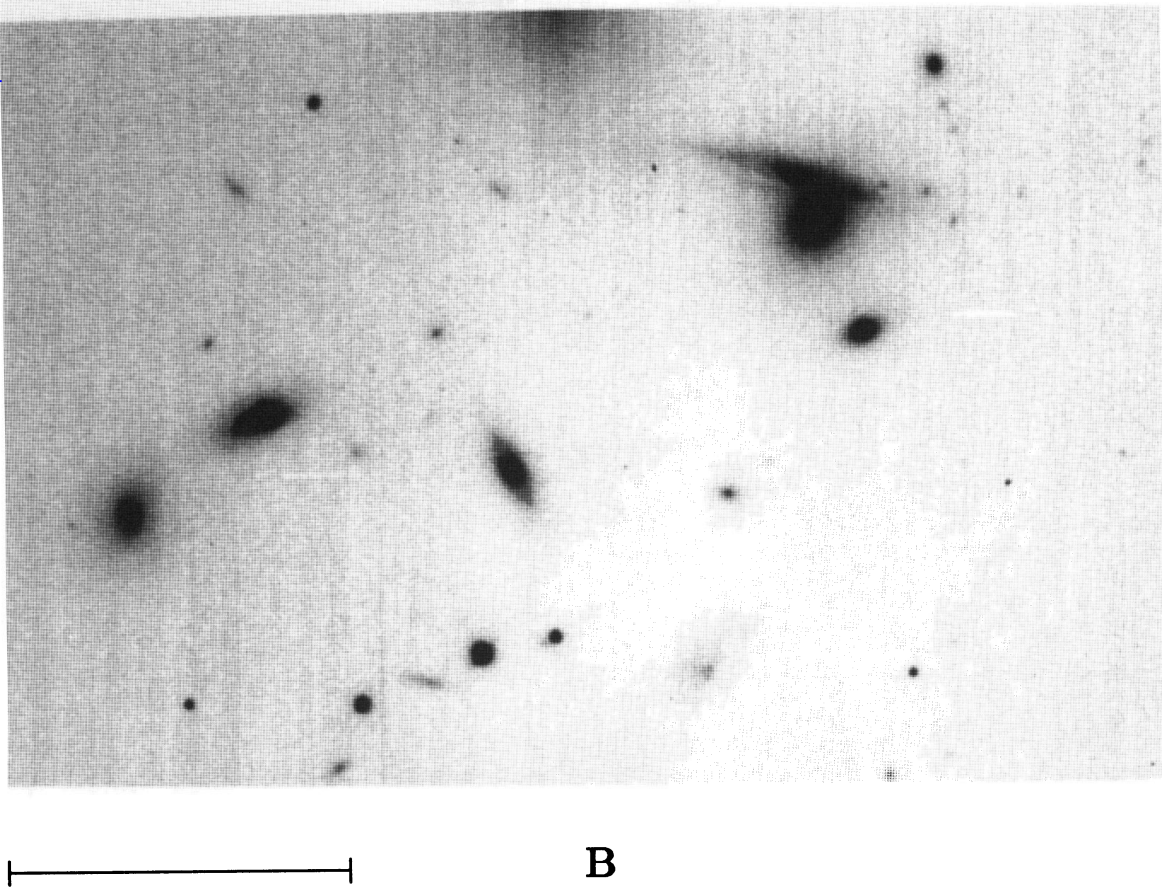
Group 75 is an accordant sextet containing three galaxies with overlapping images. The brightest of these is a radio source. Infrared emission is detected in one of the small spiral galaxies galaxy (e).

GROUP DATA

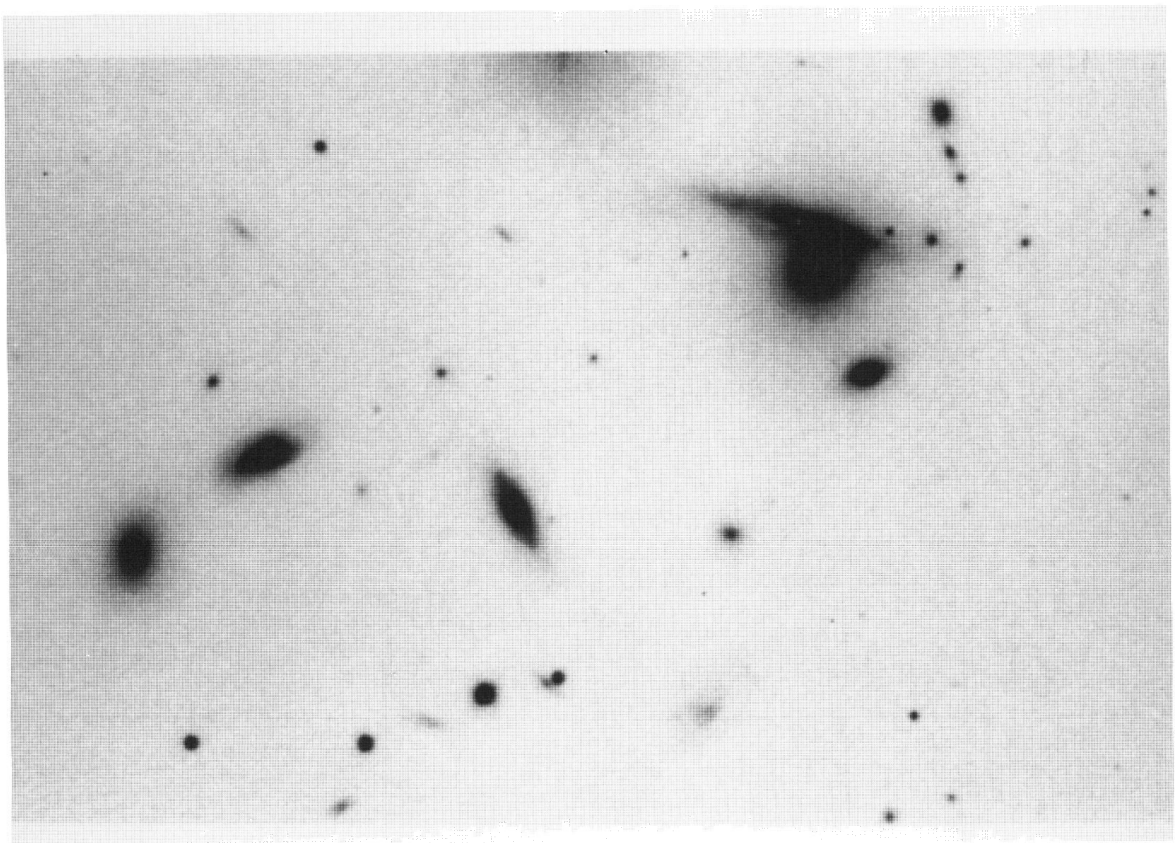
r.a. (1950)	(h m s)	15 19 19.70
dec. (1950)	(° ' ")	+21 21 45.3
galactic longitude	(°)	31.36
galactic latitude	(°)	+55.37
mean redshift		0.0416
total blue magnitude (B_{TC})		13.70
number of galaxies		6
number of accordant galaxies		6
median galaxy separation	(kpc)	37.2
radial velocity dispersion	(km/s)	295.1
crossing time	(Ht_c)	0.0105
mass-to-light ratio	($M_\odot/L_\odot$)	46.8

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	19 16.7	19 16.6	19 25.0	19 23.5	19 20.3	19 16.1
δ	(' ")	22 07.0	22 15.6	21 18.8	21 35.1	21 26.0	21 49.5
v	(km/s)	12538	12228	12292	12334	12300	13080
Δv	(km/s)	42	43	56	42	300	67
T		E4	Sb	S0	Sd	Sa	S0
a	(")	21.90	19.00	10.50	9.80	12.10	6.30
b	(")	16.00	5.20	7.00	5.40	5.50	5.20
B_{TC}		15.20	14.90	15.93	15.82	16.36	16.66
$B-R$		1.96	1.96	1.54	1.30	1.71	1.76
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)					1.02	
$\log F_{20cm}$	(mJy)		0.86				
name							

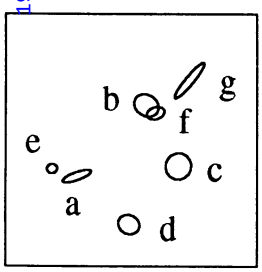


B



R

Group 76



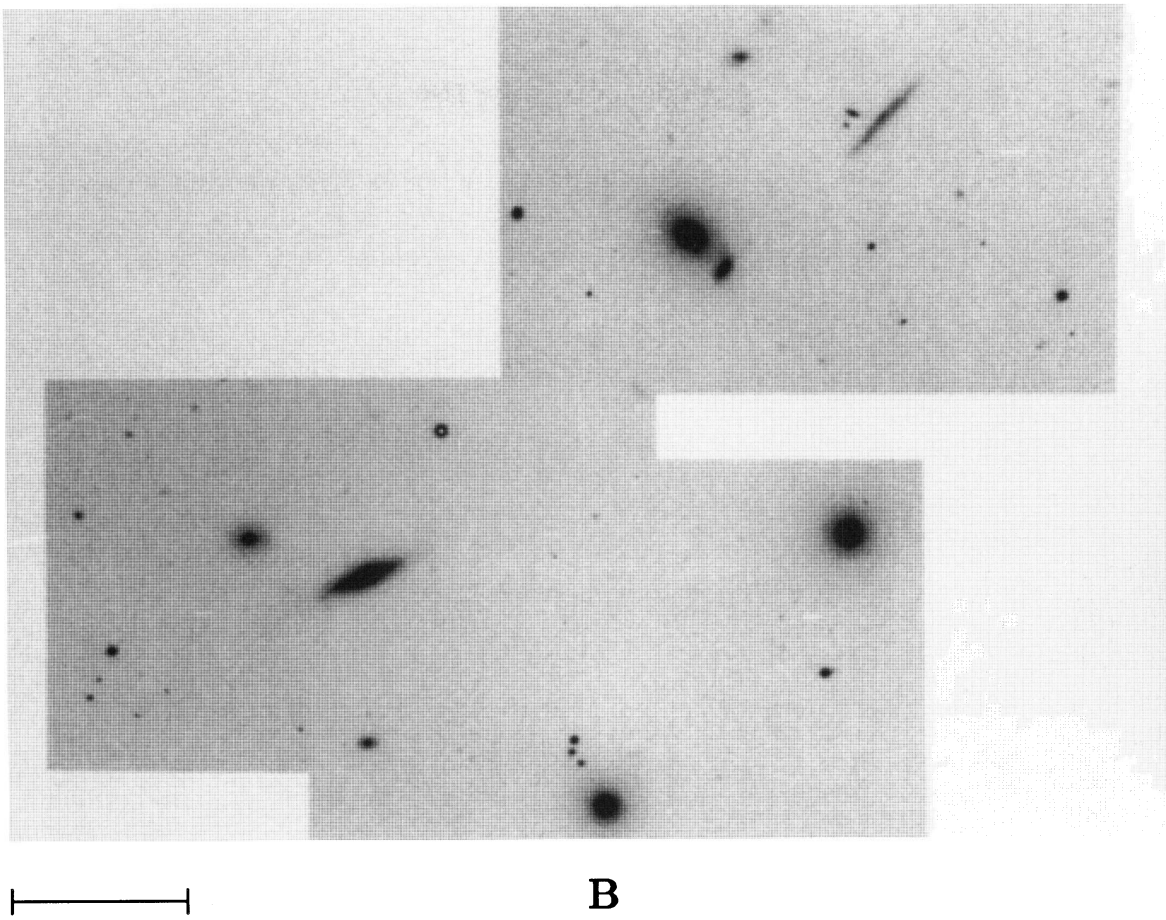
This is a relativley loose group of seven galaxies, all with accordant redshifts. Because of its relatively large population, its dynamical properties are likely to be less affected by statistical fluctuations.

GROUP DATA

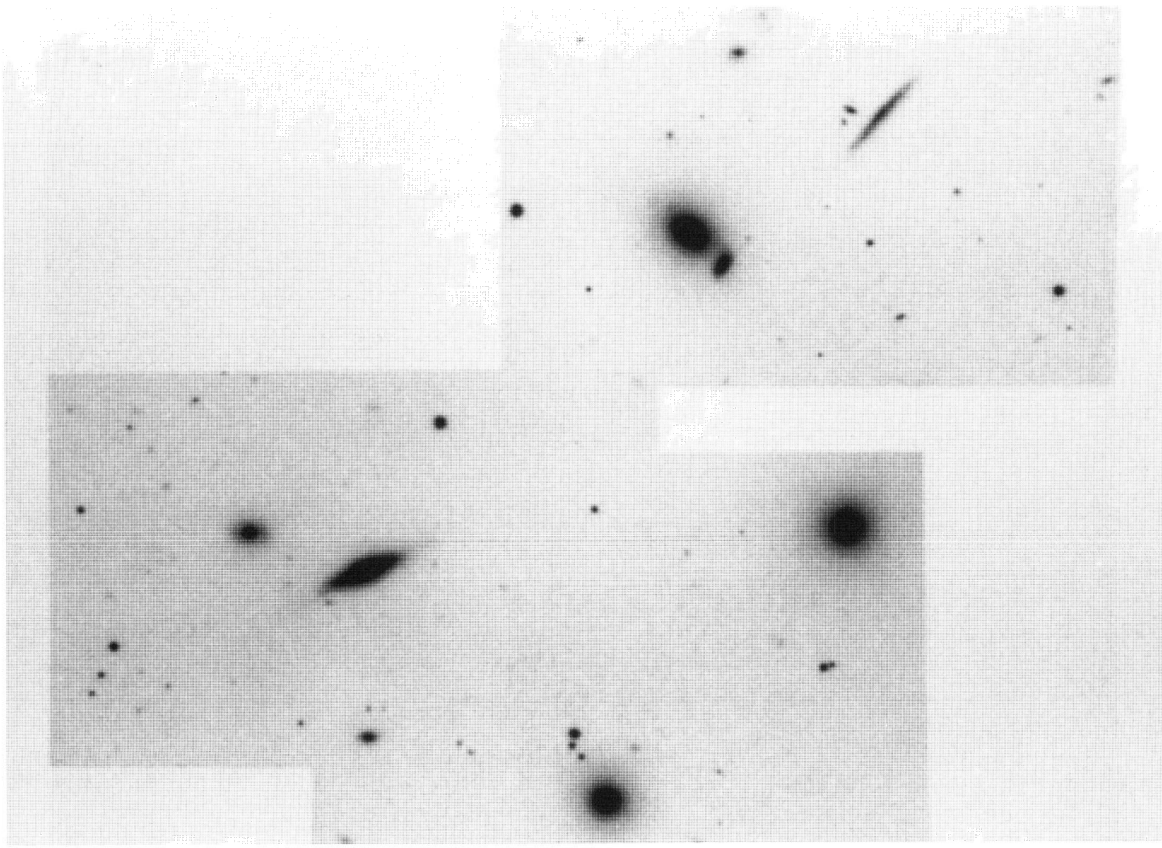
r.a. (1950)	(h m s)	15 29 14.96
dec. (1950)	(° ' ")	+07 29 20.1
galactic longitude	(°)	12.90
galactic latitude	(°)	+47.19
mean redshift		0.0340
total blue magnitude (B_{TC})		13.16
number of galaxies		7
number of accordant galaxies		7
median galaxy separation	(kpc)	72.4
radial velocity dispersion	(km/s)	245.5
crossing time	(Ht_c)	0.0224
mass-to-light ratio	($M_\odot/L_\odot$)	66.1

GALAXY DATA

Galaxy:		a	b	c	d	e	f	g
α	(m s)	29 20.8	29 13.5	29 10.12	29 15.3	29 23.4	29 12.53	29 09.0
δ	(' ")	28 35.3	30 27.0	28 51.2	27 19.5	28 46.9	30 15.0	31 05.5
v	(km/s)	10054	10002	10663	10150	10328	10216	9843
Δv	(km/s)	34	30	29	33	52	90	81
T		Sa	E2	E0	E1	SB0	Sc	
a	(")	24.00	20.40	21.20	17.30	8.20	14.20	36.10
b	(")	6.30	16.40	20.20	14.80	7.40	9.60	6.40
B_{TC}		15.08	14.44	14.73	15.21	16.65	16.48	16.40
$B-R$		1.79	1.56	1.86	1.92	1.55	1.45	1.45
$\log F_{60\mu}$	(Jy)							
$\log F_{100\mu}$	(Jy)							
$\log F_{20cm}$	(mJy)							
name		N5944		N5941	N5942			

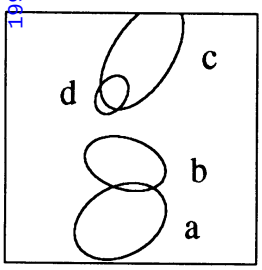


B



R

Group 77



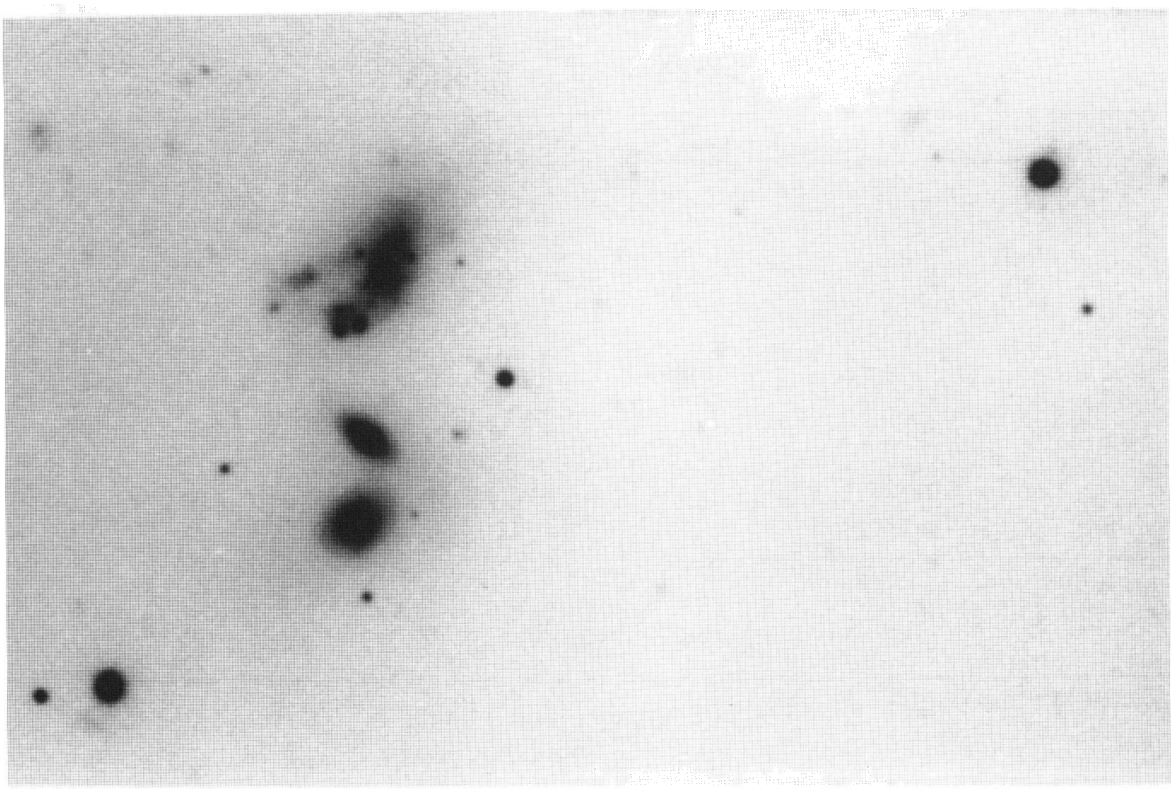
Group 77 consists of a pair of interacting high-redshift galaxies, the brighter of which is a radio source, and a low redshift galaxy with a bright knot or small companion (d).

GROUP DATA

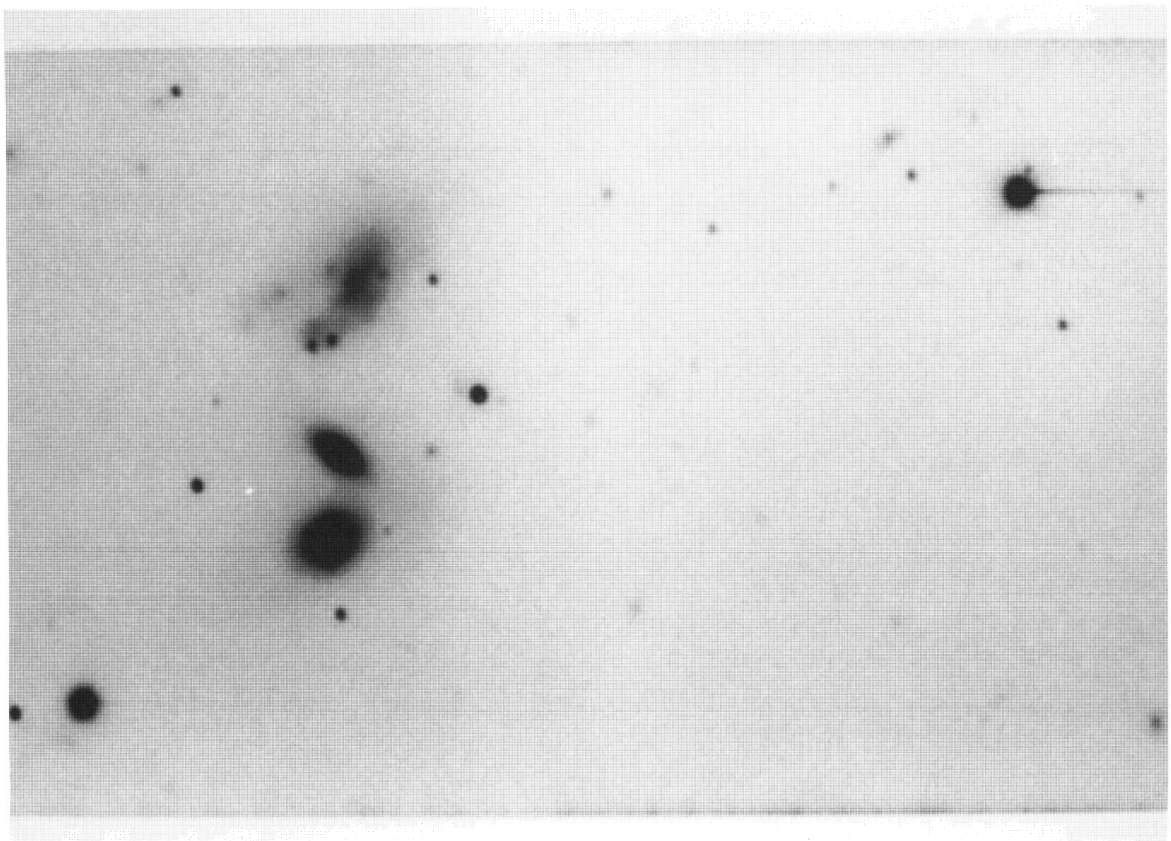
r.a. (1950)	(h m s)	15 47 05.88
dec. (1950)	(° ' ")	+21 58 35.4
galactic longitude	(°)	35.46
galactic latitude	(°)	+49.39
mean redshift		
total blue magnitude (B_{TC})		14.24
number of galaxies		4
number of accordant galaxies		2
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	47 06.0	47 05.9	47 05.6	47 06.13
δ	(' ")	58 12.0	58 27.4	58 56.3	58 45.8
v	(km/s)	10508	10690	2200	2250
Δv	(km/s)	56	69	76	63
T		S0	S0	Im	Im
a	(")	26.00	22.10	32.40	11.20
b	(")	18.40	13.70	16.10	7.70
B_{TC}		15.75	15.99	15.15	16.54
$B-R$		1.57	1.70	1.06	0.51
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	117.66			
name		U10049	U10049	U10049	U10049

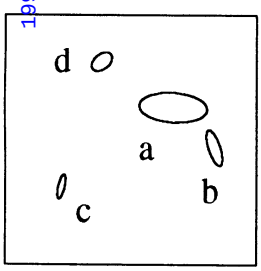


B



R

Group 78



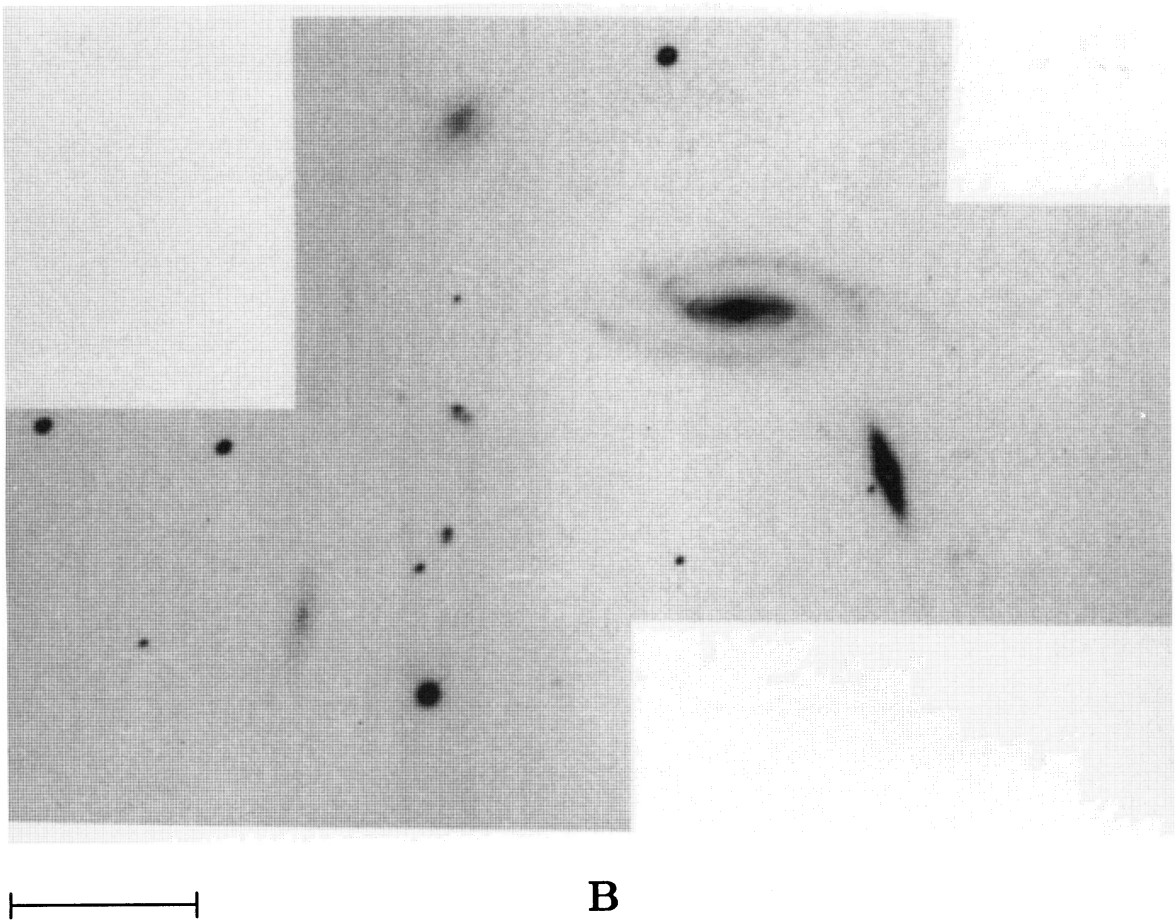
This group contains only two galaxies (a and b) with accordant redshifts. The brighter of the two is an infrared source.

GROUP DATA

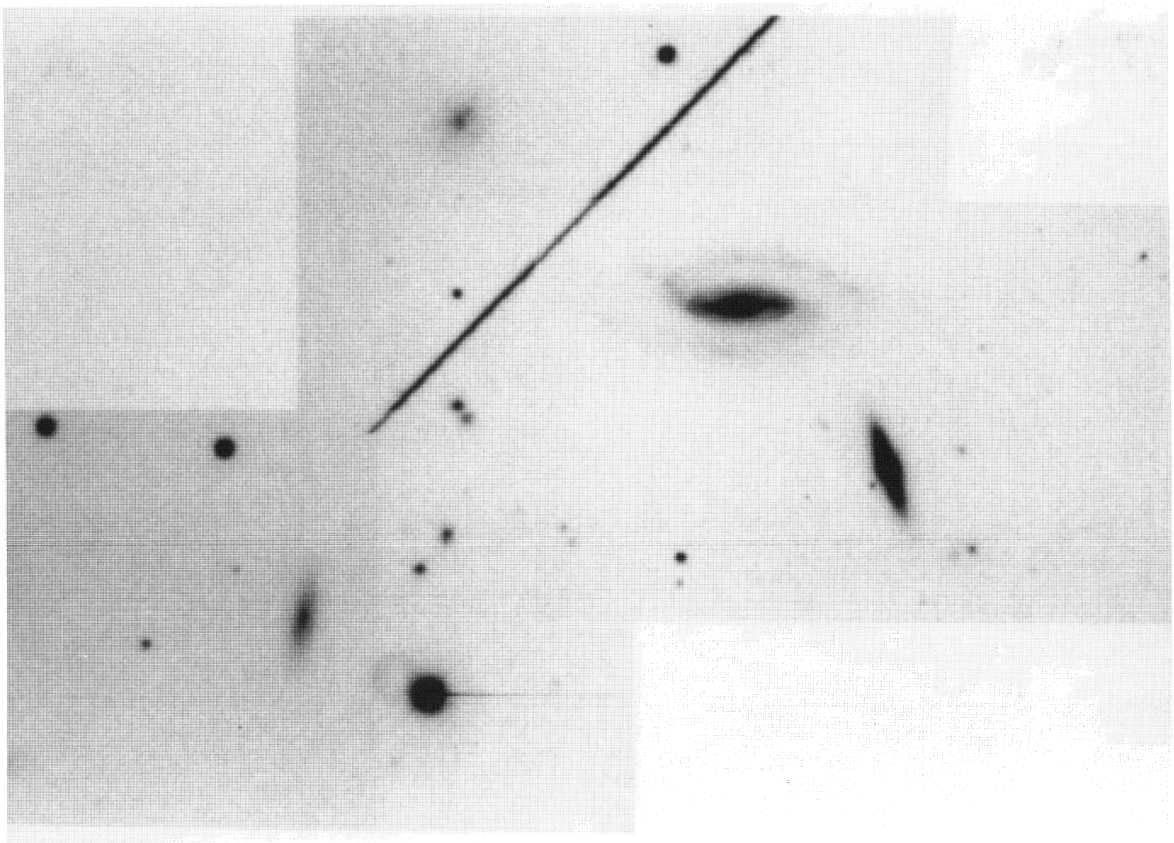
r.a. (1950)	(h m s)	15 48 12.57
dec. (1950)	(° ' ")	+68 21 56.5
galactic longitude	(°)	102.76
galactic latitude	(°)	+41.30
median redshift		
total blue magnitude (B_{TC})		13.59
number of galaxies		4
number of accordant galaxies		2
median galaxy separation	(kpc)	
radial velocity dispersion	(km/s)	
crossing time	(Ht_c)	
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	48 04.7	47 55.63	48 29.43	48 20.52
δ	(' ")	22 19.2	21 29.6	20 41.5	23 15.8
v	(km/s)	8599	9544	18200	10000
Δv	(km/s)	31	30	281	187
T		SBb	S0	S0	Sm
a	(")	41.60	23.00	15.30	14.60
b	(")	18.50	7.20	4.20	9.30
B_{TC}		14.35	14.61	17.59	16.19
$B-R$		1.42	1.41	2.18	0.98
$\log F_{60\mu}$	(Jy)	0.81			
$\log F_{100\mu}$	(Jy)	2.11			
$\log F_{20cm}$	(mJy)				
name		U10057			

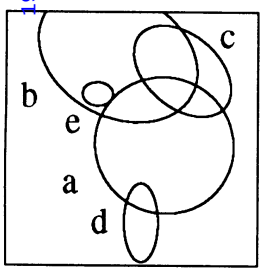


B



R

Group 79



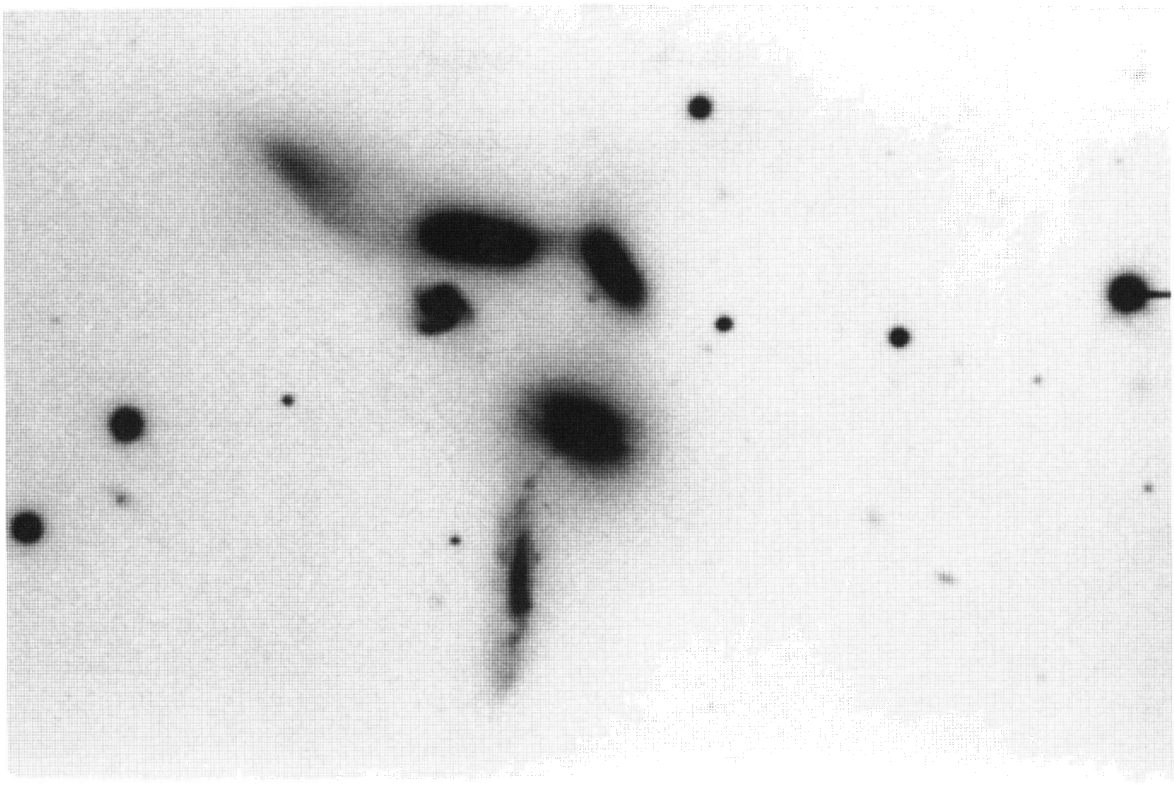
This is the famous group known as Seyfert's Sextet (also VV 115). It is the most compact group in this catalogue, having a median intergalaxy separation of only $6.8h^{-1}$ kpc. This combined with a relatively low velocity dispersion results in a low mass-to-light ratio. The bright elliptical galaxy (a) is a radio and infrared source.

GROUP DATA

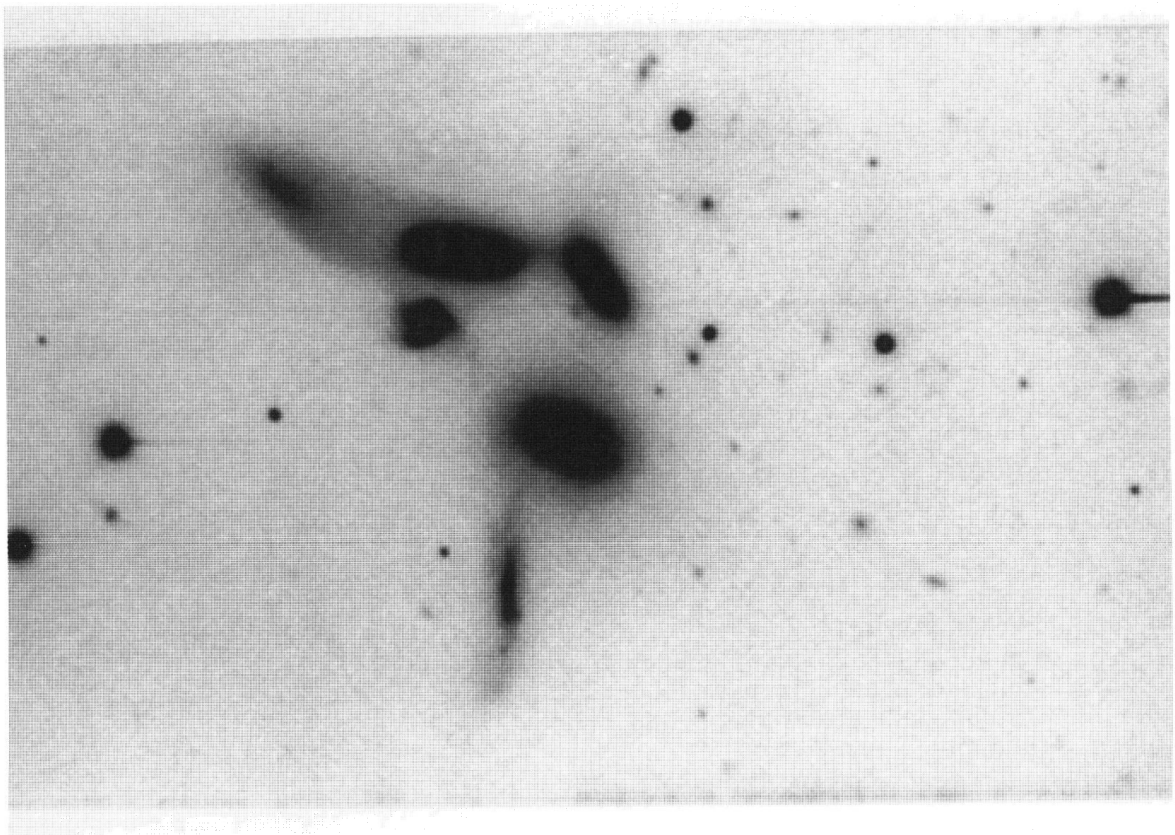
r.a. (1950)	(h m s)	15 57 00.20
dec. (1950)	(° ' ")	+20 53 53.1
galactic longitude	(°)	34.97
galactic latitude	(°)	+46.87
mean redshift		0.0145
total blue magnitude (B_{TC})		12.87
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	6.8
radial velocity dispersion	(km/s)	138.0
crossing time	(Ht_c)	0.0037
mass-to-light ratio	($M_\odot/L_\odot$)	16.2

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	56 59.6	57 00.8	56 59.1	57 00.2	57 01.3
δ	(' ")	53 43.2	54 15.4	54 09.8	53 15.5	54 01.5
v	(km/s)	4294	4446	4146	4503	19809
Δv	(km/s)	35	25	50	43	50
T		E0	S0	S0	Sdm	Scd
a	(")	50.20	60.50	40.30	28.10	11.10
b	(")	48.60	44.10	26.10	12.30	8.60
B_{TC}		14.35	13.78	14.72	15.87	15.87
$B-R$		1.60	1.44	1.27	0.85	1.32
$\log F_{60\mu}$	(Jy)	1.02				
$\log F_{100\mu}$	(Jy)	2.10				
$\log F_{20cm}$	(mJy)	5.37				
name		N6027	N6027	N6027	N6027	N6027

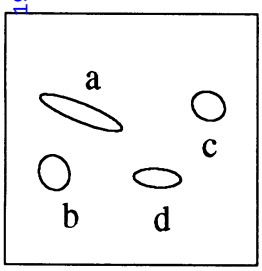


B



R

Group 80



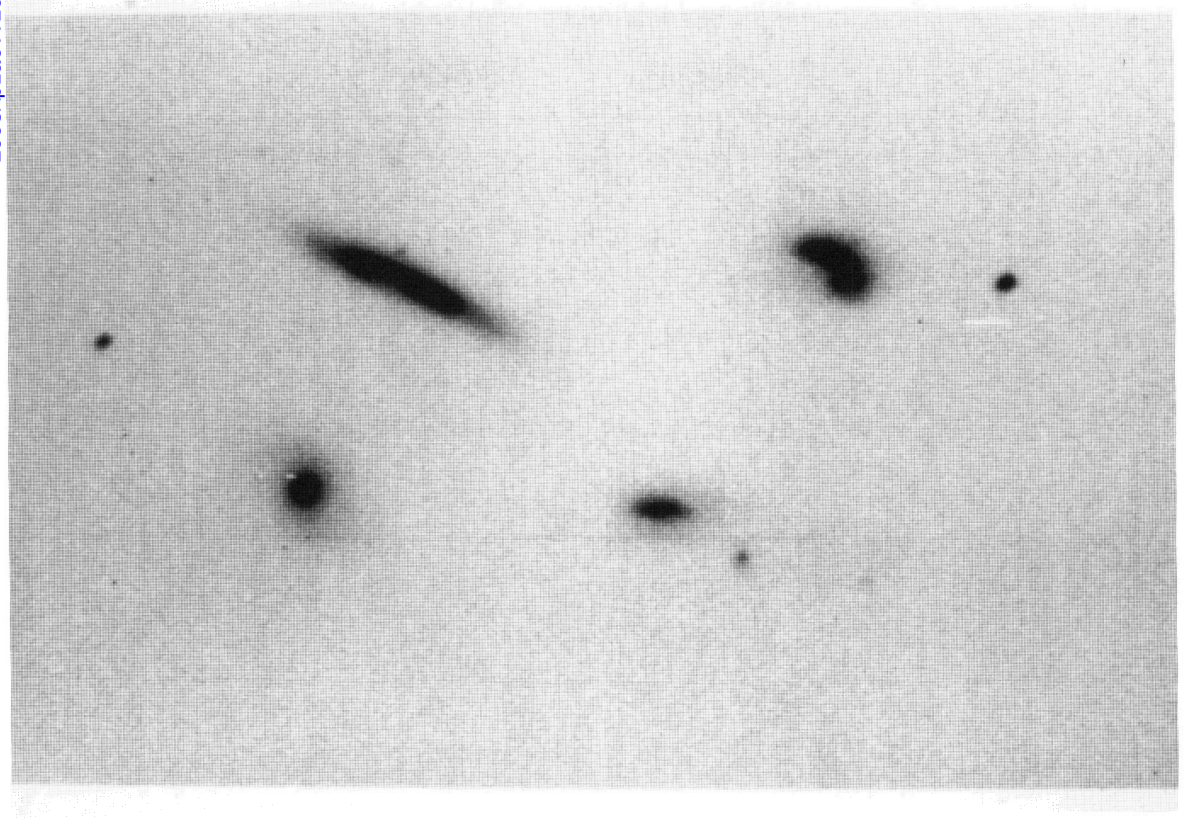
This is small quartet of late-type galaxies. The brightest galaxy is a radio and infrared source.

GROUP DATA

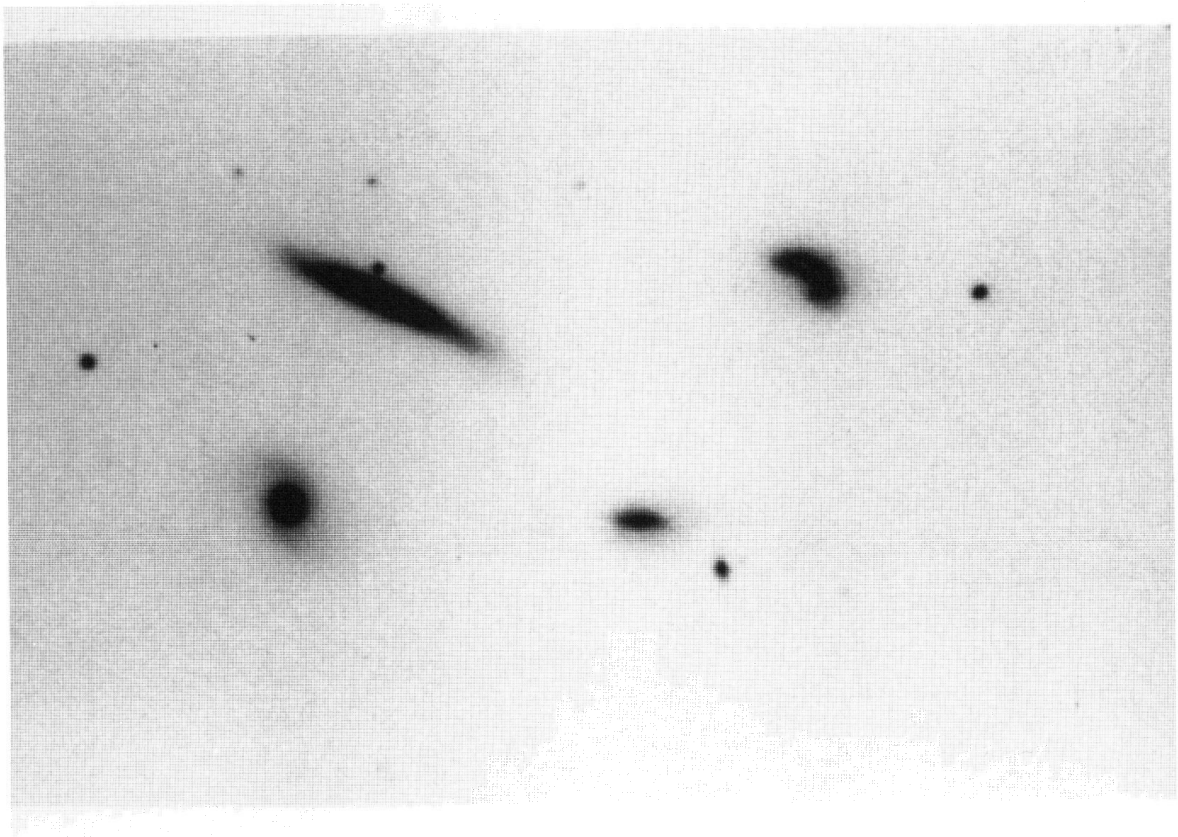
r.a. (1950)	(h m s)	15 58 46.61
dec. (1950)	(° ' ")	+65 22 04.6
galactic longitude	(°)	98.62
galactic latitude	(°)	+41.96
mean redshift		0.0310
total blue magnitude (B_{TC})		14.01
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	25.1
radial velocity dispersion	(km/s)	269.2
crossing time	(Ht_c)	0.0069
mass-to-light ratio	($M_\odot/L_\odot$)	125.9

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	58 50.7	58 53.1	58 39.0	48 43.7
δ	(' ")	22 21.7	21 46.8	22 25.8	21 44.0
v	(km/s)	8963	9584	9550	9108
Δv	(km/s)	45	39	37	54
T		Sd	Sa	Im	Im
a	(")	25.40	10.20	9.80	13.60
b	(")	5.40	8.70	8.20	5.40
B_{TC}		14.76	15.92	15.83	16.18
$B-R$		1.38	1.49	0.89	0.84
$\log F_{60\mu}$	(Jy)	2.20			
$\log F_{100\mu}$	(Jy)	4.90			
$\log F_{20cm}$	(mJy)	13.02			
name					

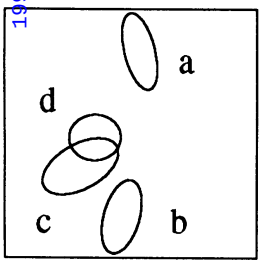


B



R

Group 81



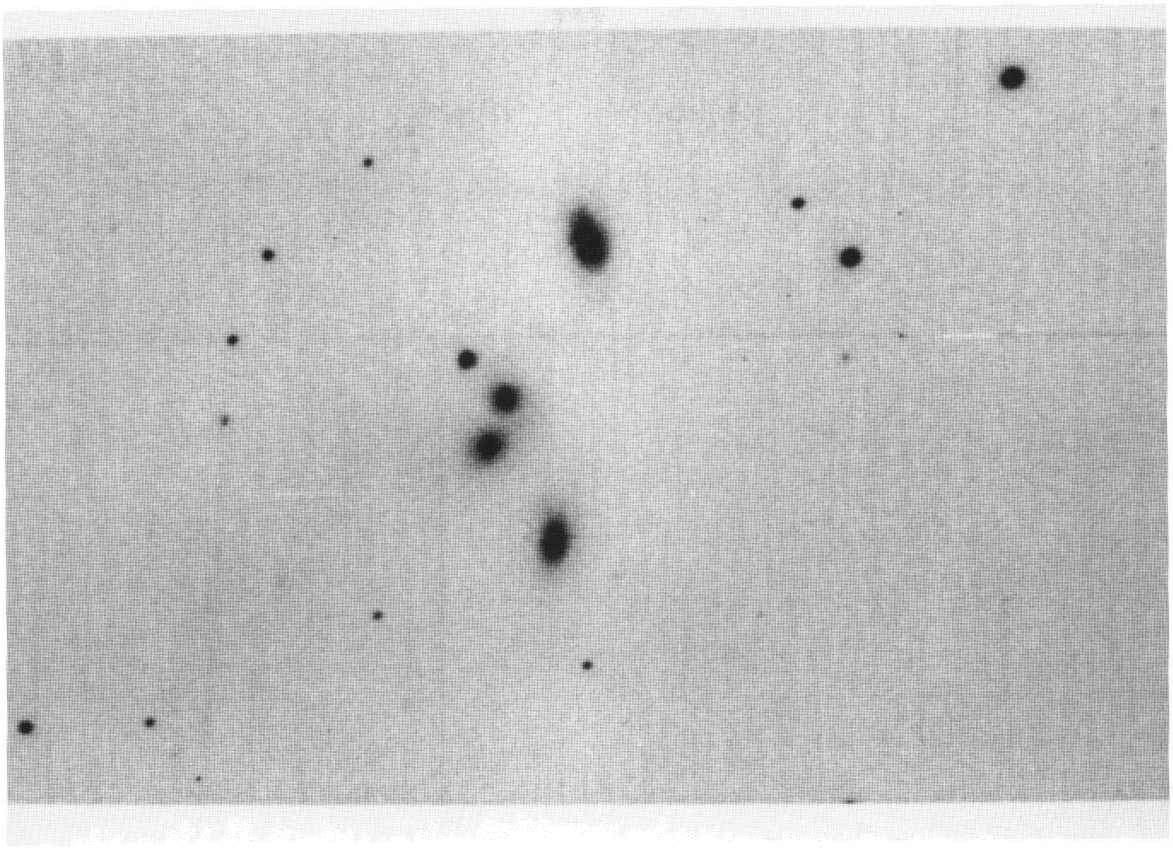
Group 81 is a compact quartet of mostly early-type galaxies. The bright spiral galaxy (a) is a radio source.

GROUP DATA

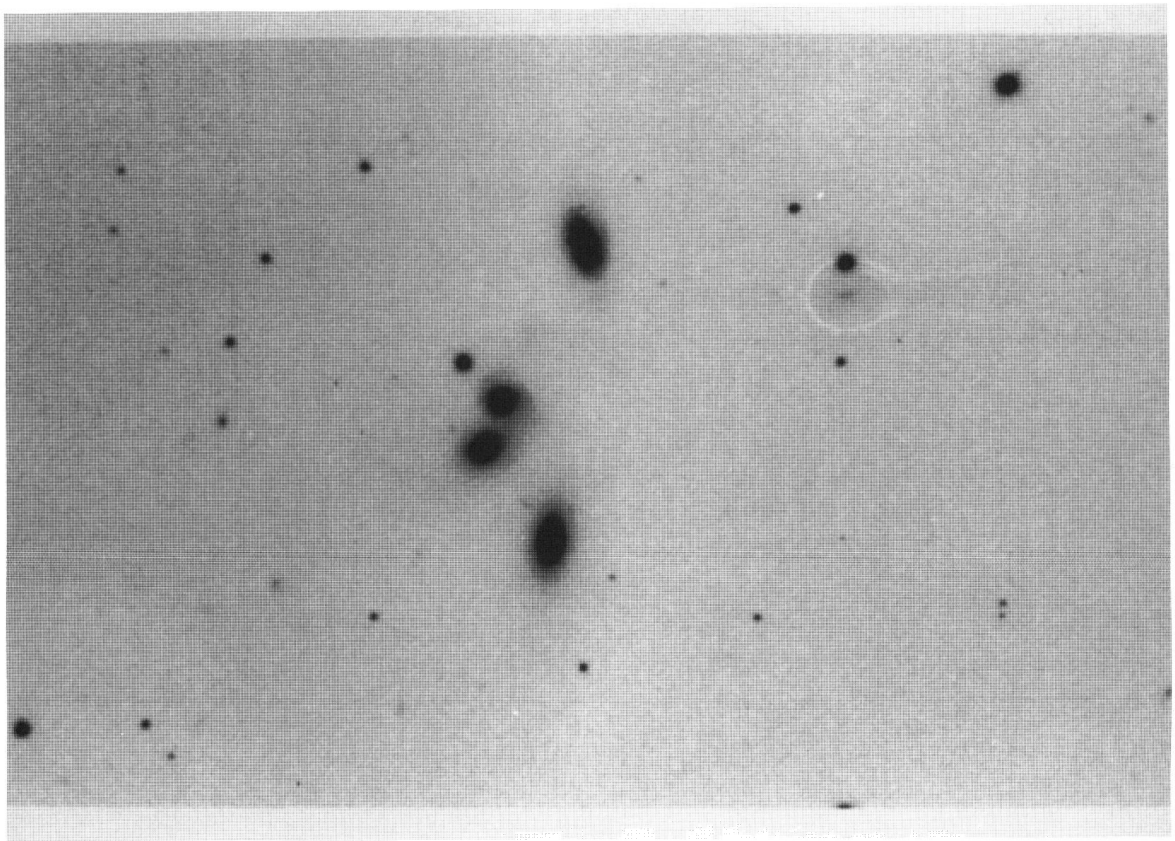
r.a. (1950)	(h m s)	16 15 54.25
dec. (1950)	(° ' ")	+12 54 57.6
galactic longitude	(°)	27.08
galactic latitude	(°)	+39.71
mean redshift		0.0499
total blue magnitude (B_{TC})		15.19
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	18.2
radial velocity dispersion	(km/s)	177.8
crossing time	(Ht_c)	0.0087
mass-to-light ratio	($M_\odot/L_\odot$)	43.7

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	15 53.6	15 54.0	15 54.8	15 54.5
δ	(' ")	55 25.4	54 35.1	54 50.5	54 59.3
v	(km/s)	14676	15150	15050	14954
Δv	(km/s)	46	94	96	91
T		Sc	S0	S0	S0a
a	(")	11.90	11.70	12.60	7.80
b	(")	4.60	5.40	6.80	6.90
B_{TC}		16.25	16.51	17.18	17.14
$B-R$		1.46	1.85	1.89	1.87
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	2.45			
name		U10319	U10319	U10319	U10319

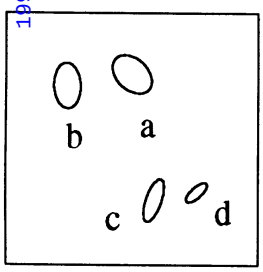


B



R

Group 82



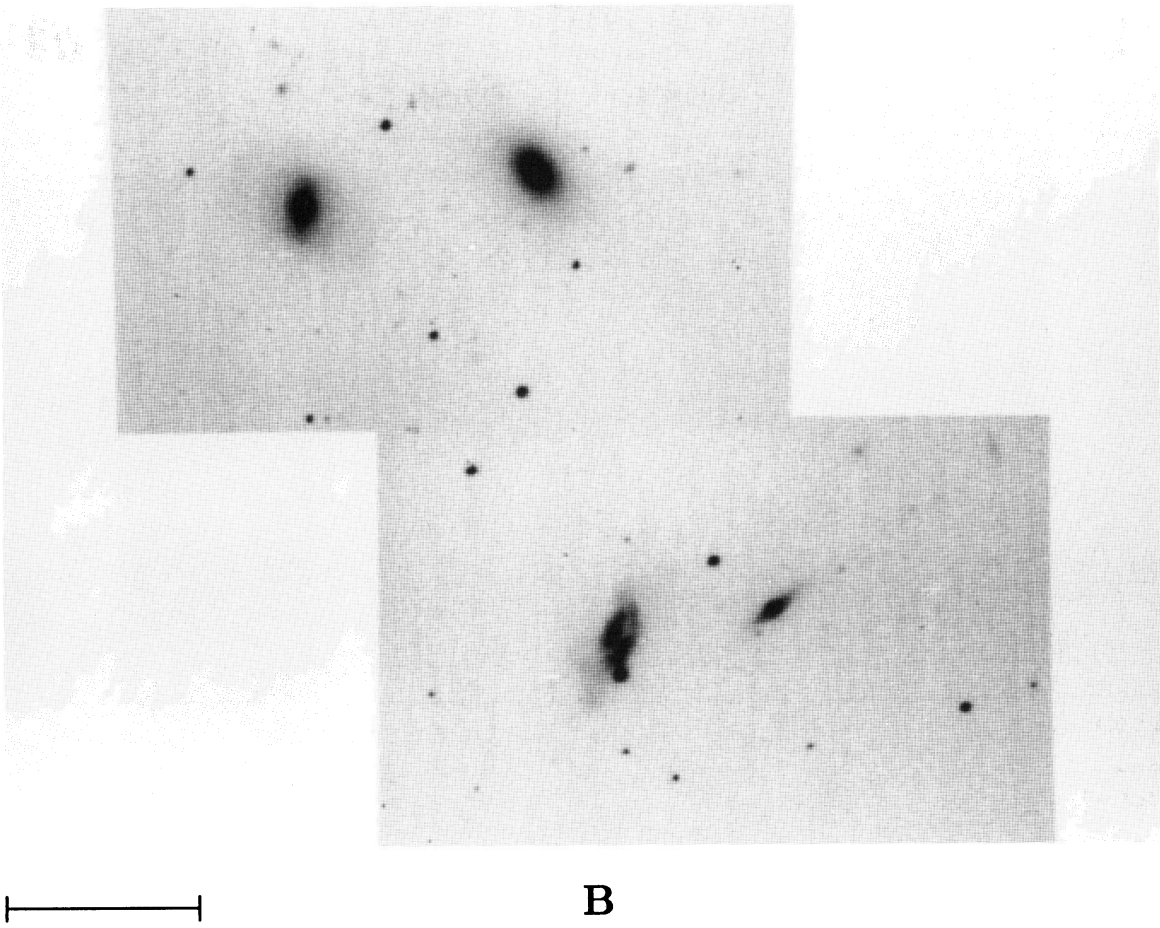
Group 82 is a relatively loose quartet with a very high velocity dispersion. The irregular galaxy (c) is a radio and infrared source.

GROUP DATA

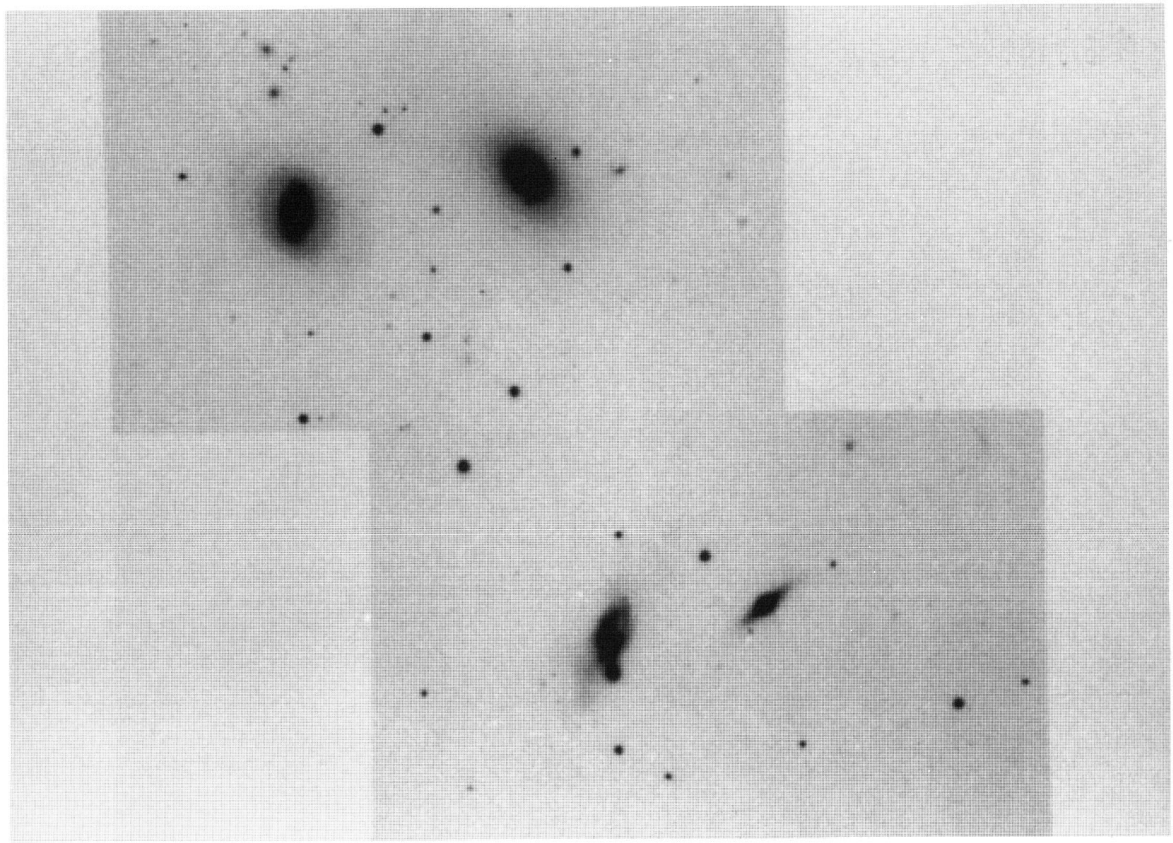
r.a. (1950)	(h m s)	16 26 28.03
dec. (1950)	(° ' ")	+32 56 21.0
galactic longitude	(°)	53.70
galactic latitude	(°)	+43.18
mean redshift		0.0362
total blue magnitude (B_{TC})		13.20
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	70.8
radial velocity dispersion	(km/s)	616.6
crossing time	(Ht_c)	0.0085
mass-to-light ratio	($M_\odot/L_\odot$)	501.2

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	26 28.5	26 34.1	26 26.6	26 22.9
δ	(' ")	57 31.0	57 18.5	55 13.0	55 21.6
v	(km/s)	11177	10447	10095	11685
Δv	(km/s)	30	37	38	46
T		E3	SBa	Im	S0a
a	(")	24.80	24.80	24.50	14.70
b	(")	16.90	14.70	8.50	5.70
B_{TC}		14.14	14.62	14.78	15.95
$B-R$		1.71	1.67	1.21	1.55
$\log F_{60\mu}$	(Jy)			1.00	
$\log F_{100\mu}$	(Jy)			2.02	
$\log F_{20cm}$	(mJy)			7.66	
name		N6162	N6163	N6161	

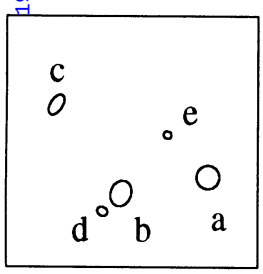


B



R

Group 83



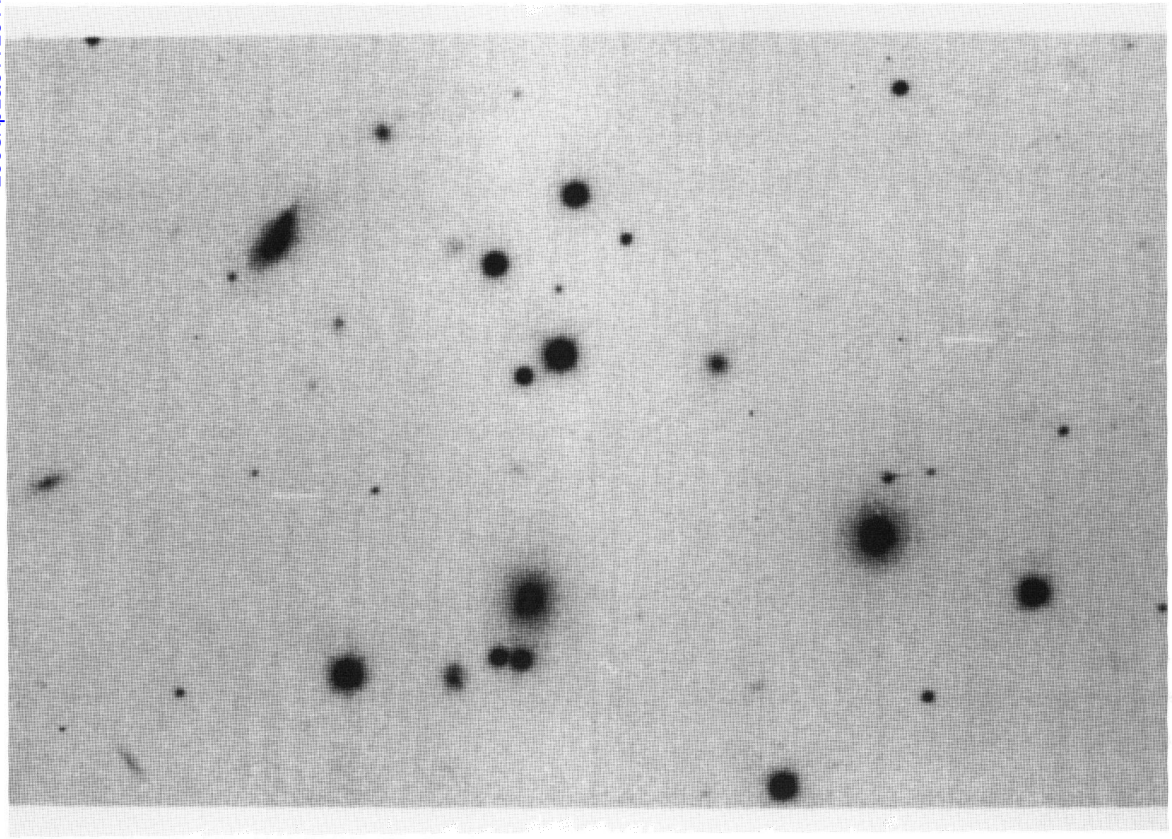
This distant group is an accordant quintet. It has a high velocity dispersion and relatively large intergalaxy separation giving it a high mass-to-light ratio.

GROUP DATA

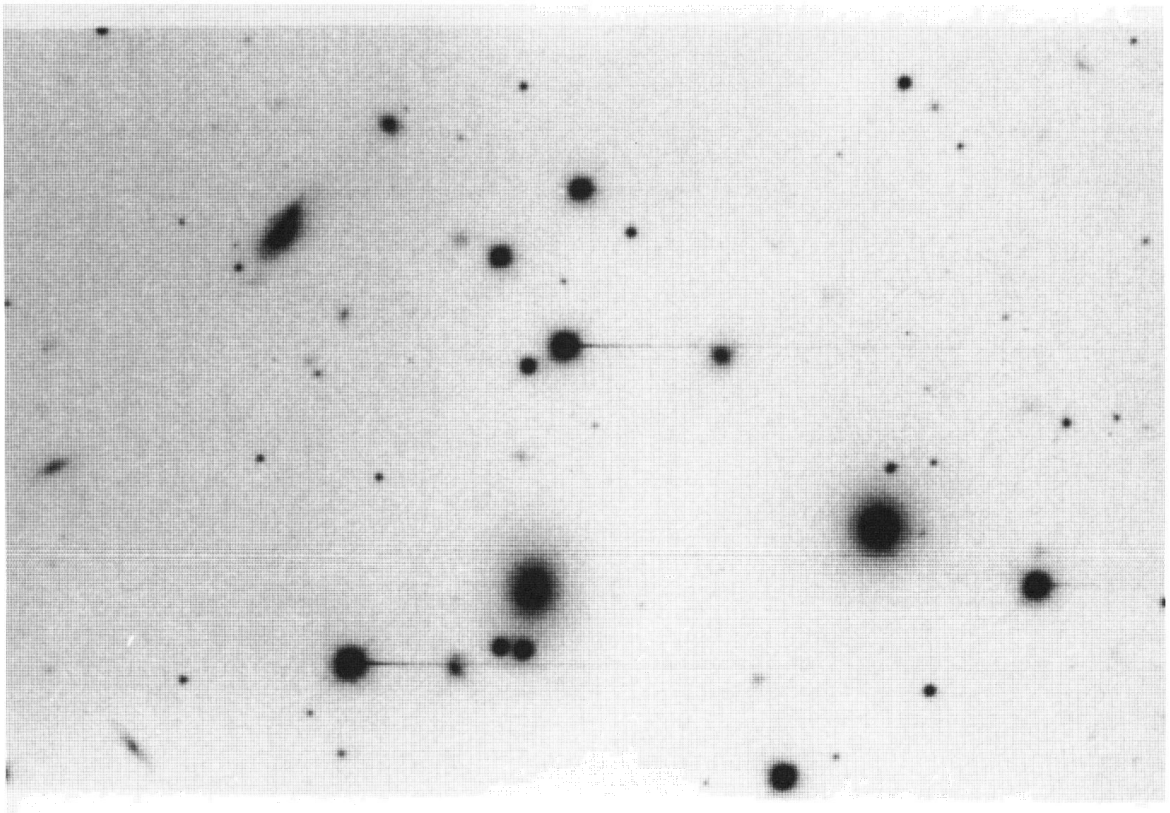
r.a. (1950)	(h m s)	16 33 12.91
dec. (1950)	(° ' ")	+06 22 09.6
galactic longitude	(°)	22.22
galactic latitude	(°)	+32.94
mean redshift		0.0531
total blue magnitude (B_{TC})		14.89
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	50.1
radial velocity dispersion	(km/s)	457.1
crossing time	(Ht_c)	0.0083
mass-to-light ratio	($M_\odot/L_\odot$)	457.1

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	33 09.4	33 13.3	33 16.3	33 14.2	33 11.3
δ	(' ")	22 01.0	21 50.0	22 49.7	21 37.9	22 29.4
v	(km/s)	15560	16442	16520	15500	15560
Δv	(km/s)	60	69	133	133	160
T		E0	E2	Scd	Sd	S0
a	(")	7.90	8.90	7.80	3.70	2.90
b	(")	7.90	7.00	4.20	3.00	2.50
B_{TC}		15.99	16.04	16.70	17.91	18.40
$B-R$		1.76	1.75	1.16	1.04	1.69
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name						

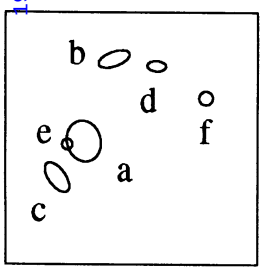


B



R

Group 84



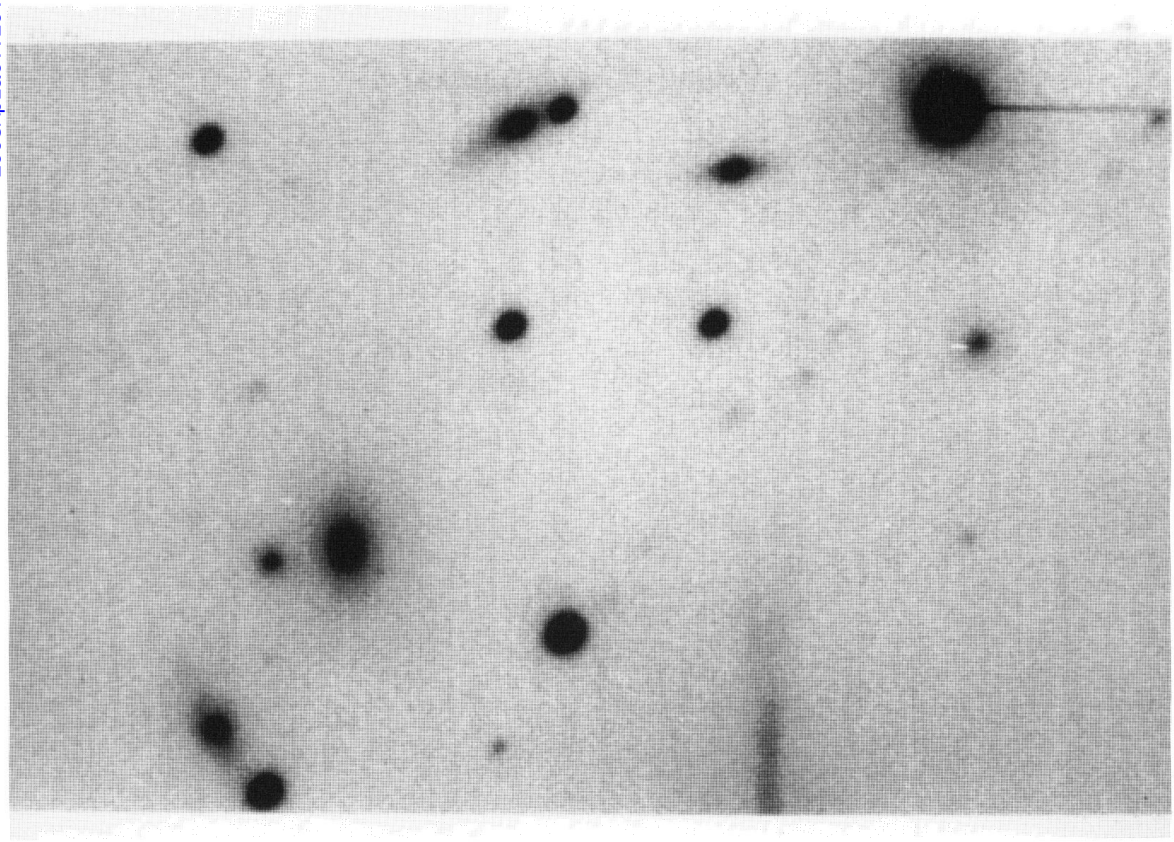
Group 84 consists of a distant quintet plus a faint galaxy with about twice the redshift. The bright elliptical galaxy (a) is a radio source.

GROUP DATA

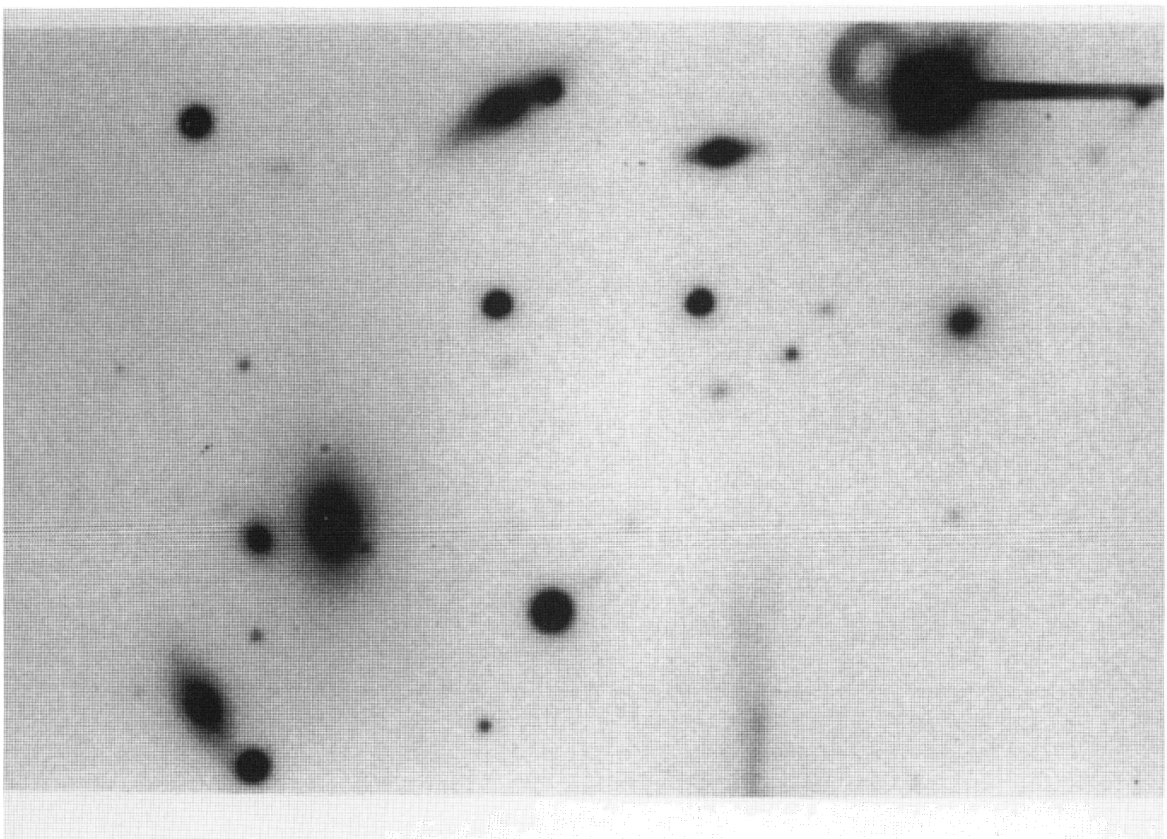
r.a. (1950)	(h m s)	16 46 35.58
dec. (1950)	(° ' ")	+77 56 02.4
galactic longitude	(°)	110.61
galactic latitude	(°)	+32.99
mean redshift		0.0556
total blue magnitude (B_{TC})		13.88
number of galaxies		6
number of accordant galaxies		5
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	204.2
crossing time	(Ht_c)	0.0229
mass-to-light ratio	($M_\odot/L_\odot$)	24.5

GALAXY DATA

Galaxy:		a	b	c	d	e	f
α	(m s)	46 44.0	46 35.6	46 51.4	46 23.8	46 48.6	46 10.2
δ	(' ")	55 38.8	56 50.7	55 07.8	56 44.4	55 36.2	56 16.3
v	(km/s)	16654	16554	16353	16800	16950	32500
Δv	(km/s)	61	73	71	92	81	100
T		E2	S0	Sa	S0	E0	E0
a	(")	17.80	14.40	14.90	8.20	4.60	6.10
b	(")	14.70	6.40	7.40	4.60	4.60	6.10
B_{TC}		14.66	16.10	15.67	16.80	16.89	16.92
$B-R$		1.64	1.77	1.60	1.66	1.62	1.90
$\log F_{60\mu}$	(Jy)						
$\log F_{100\mu}$	(Jy)						
$\log F_{20cm}$	(mJy)	24.80					
name							

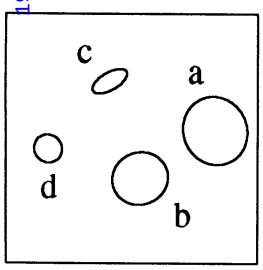


B



R

Group 85



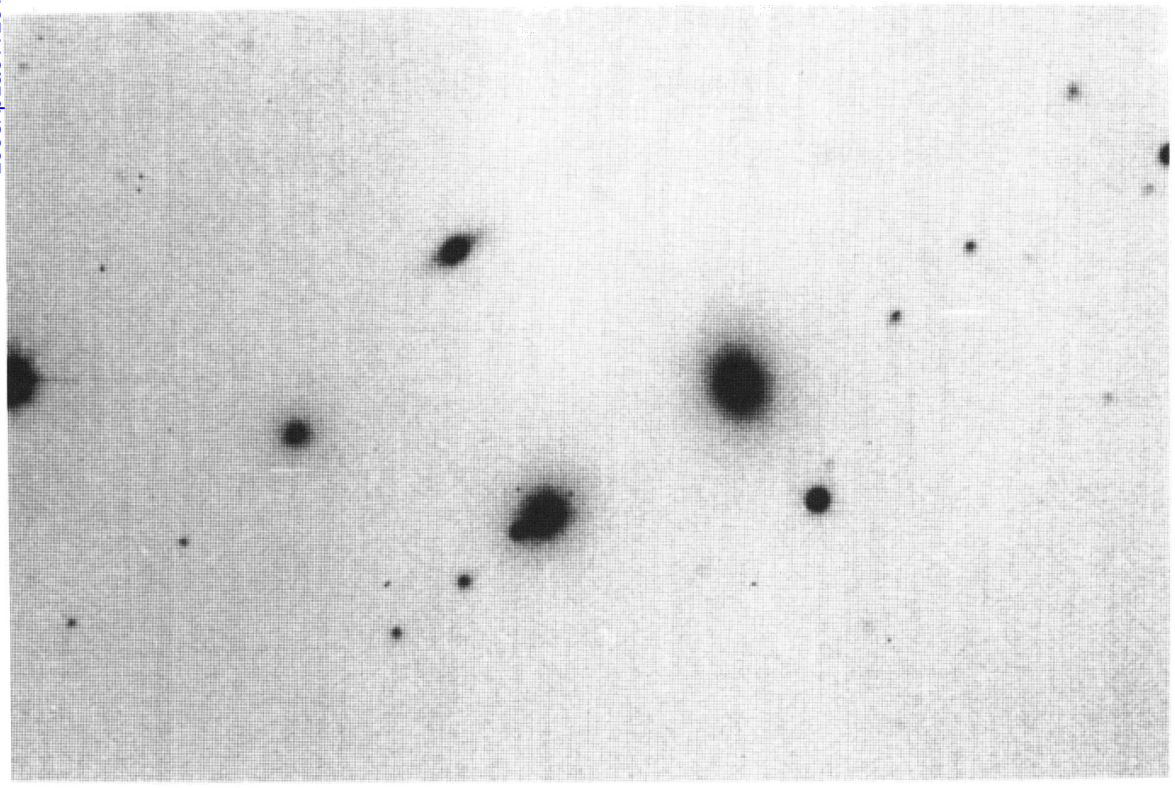
Group 85 is a small quartet of early-type galaxies. Its velocity dispersion and mass-to-light ratio are quite high. The bright elliptical galaxy (a) is a radio source.

GROUP DATA

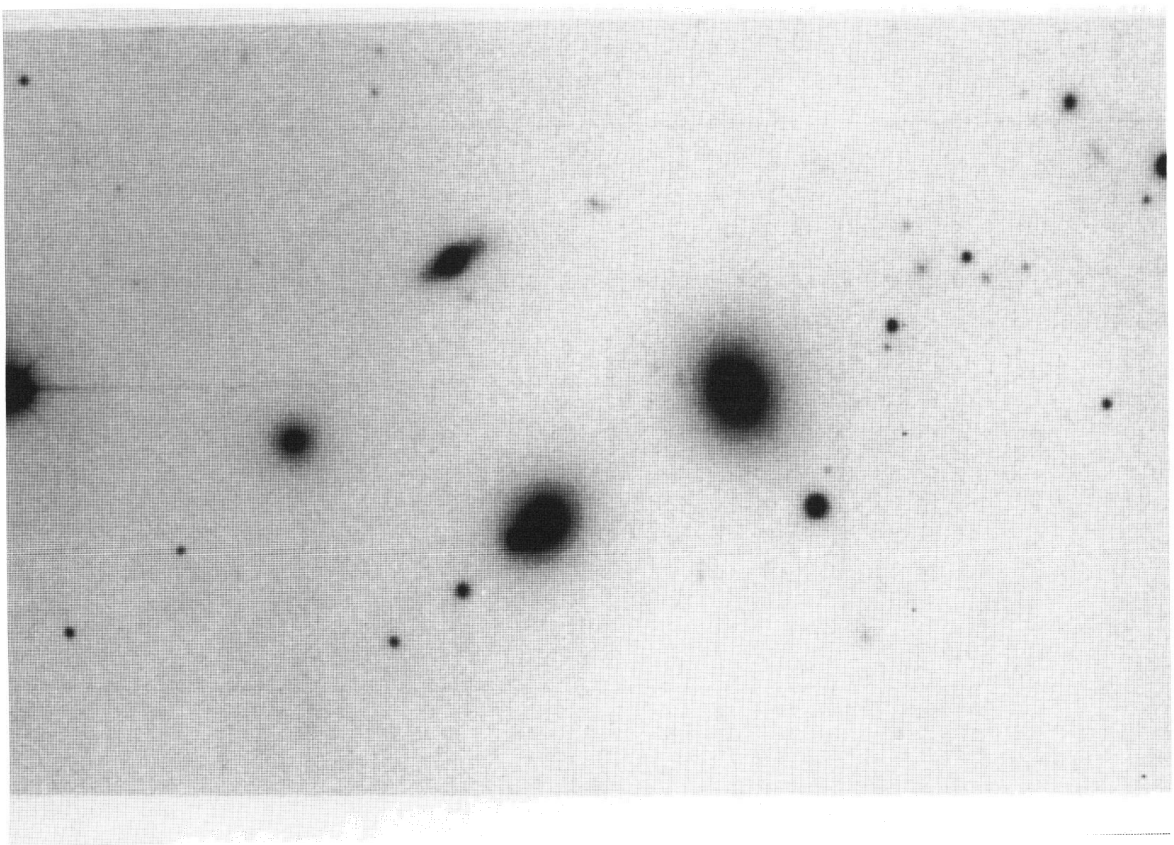
r.a. (1950)	(h m s)	18 51 31.25
dec. (1950)	(° ' ")	+73 17 21.0
galactic longitude	(°)	104.35
galactic latitude	(°)	+25.97
mean redshift		0.0393
total blue magnitude (B_{TC})		14.37
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	24.5
radial velocity dispersion	(km/s)	363.1
crossing time	(Ht_c)	0.0050
mass-to-light ratio	($M_\odot/L_\odot$)	208.9

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	51 22.0	51 30.0	51 33.2	51 39.8
δ	(' ")	17 23.1	17 00.7	17 45.8	17 14.6
v	(km/s)	11155	12122	11912	11900
Δv	(km/s)	38	36	47	96
T		E1	E1	S0	E0
a	(")	16.00	13.10	9.00	6.70
b	(")	14.70	12.30	4.10	6.40
B_{TC}		15.12	15.62	16.98	17.01
$B-R$		1.82	1.82	1.85	1.72
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)	12.72			
name					

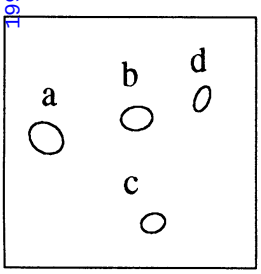


B



R

Group 86



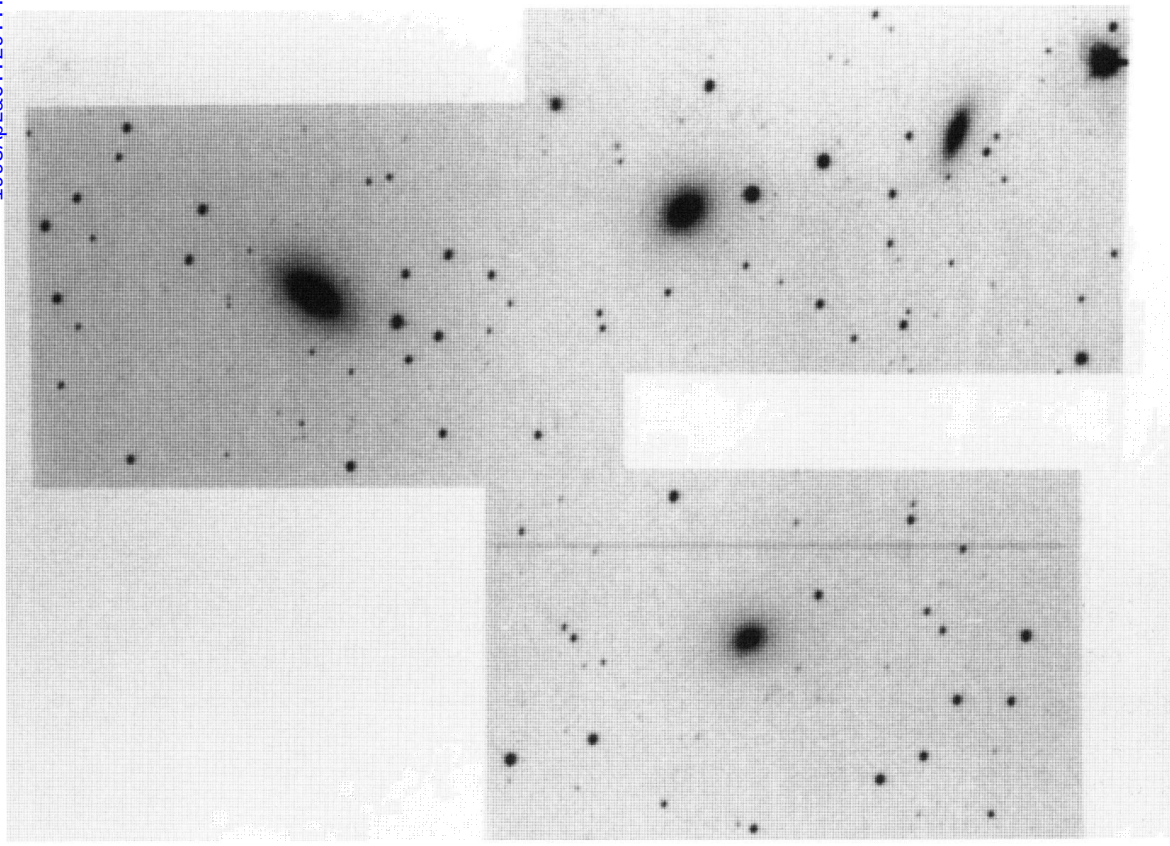
This is a relatively loose quartet of early-type galaxies. A possibly-related galaxy of comparable brightness can be found to the west of the group.

GROUP DATA

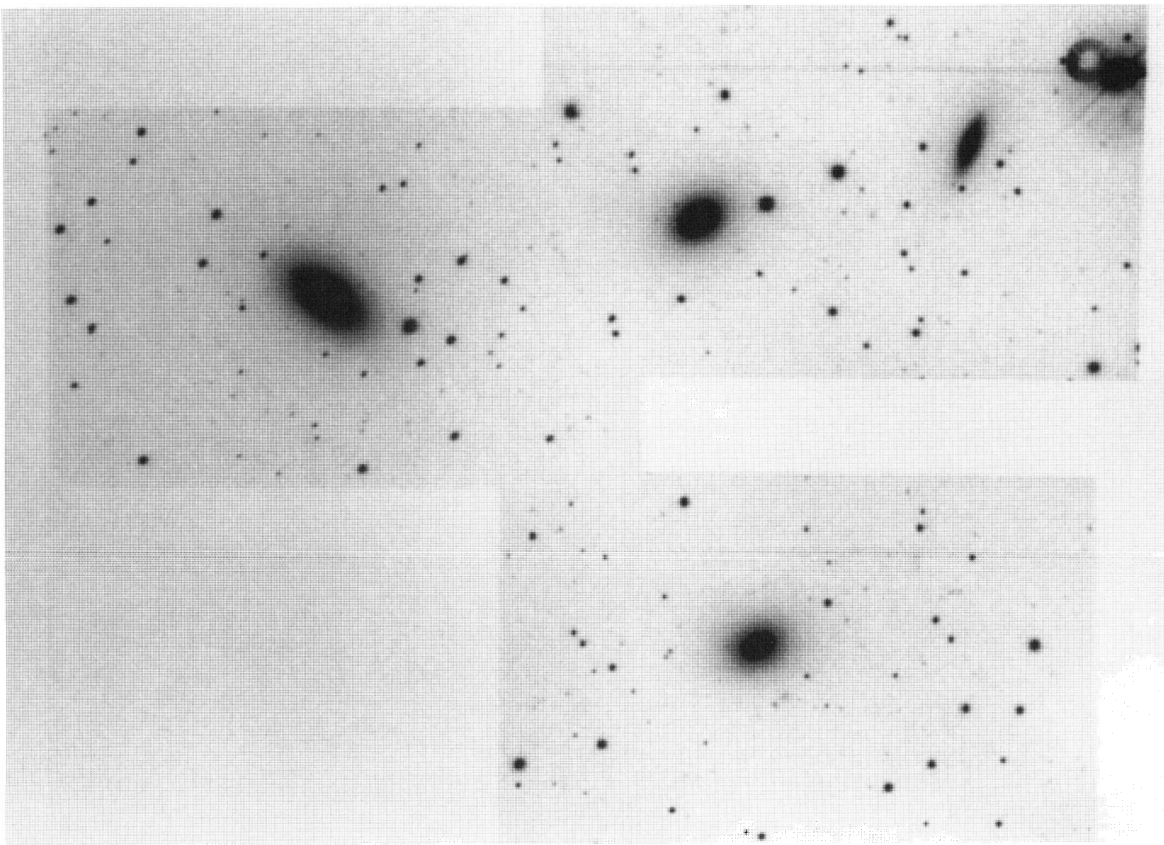
r.a. (1950)	(h m s)	19 48 50.27
dec. (1950)	(° ' ")	-30 57 19.5
galactic longitude	(°)	9.81
galactic latitude	(°)	-25.67
mean redshift		0.0199
total blue magnitude (B_{TC})		12.82
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	46.8
radial velocity dispersion	(km/s)	269.2
crossing time	(Ht_c)	0.0129
mass-to-light ratio	($M_\odot/L_\odot$)	177.8

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	48 59.9	48 50.0	48 48.2	48 42.9
δ	(' ")	57 10.7	56 42.8	59 09.3	56 15.3
v	(km/s)	6174	6196	5529	5916
Δv	(km/s)	39	45	42	50
T		E2	E2	SB0	S0
a	(")	25.40	22.10	17.20	18.70
b	(")	20.30	16.60	13.30	9.60
B_{TC}		13.68	14.18	15.06	15.02
$B-R$		1.92	1.92	2.20	1.66
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

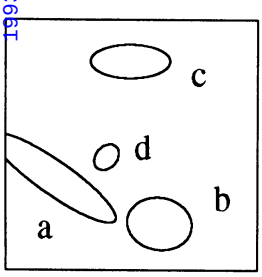


B



R

Group 87



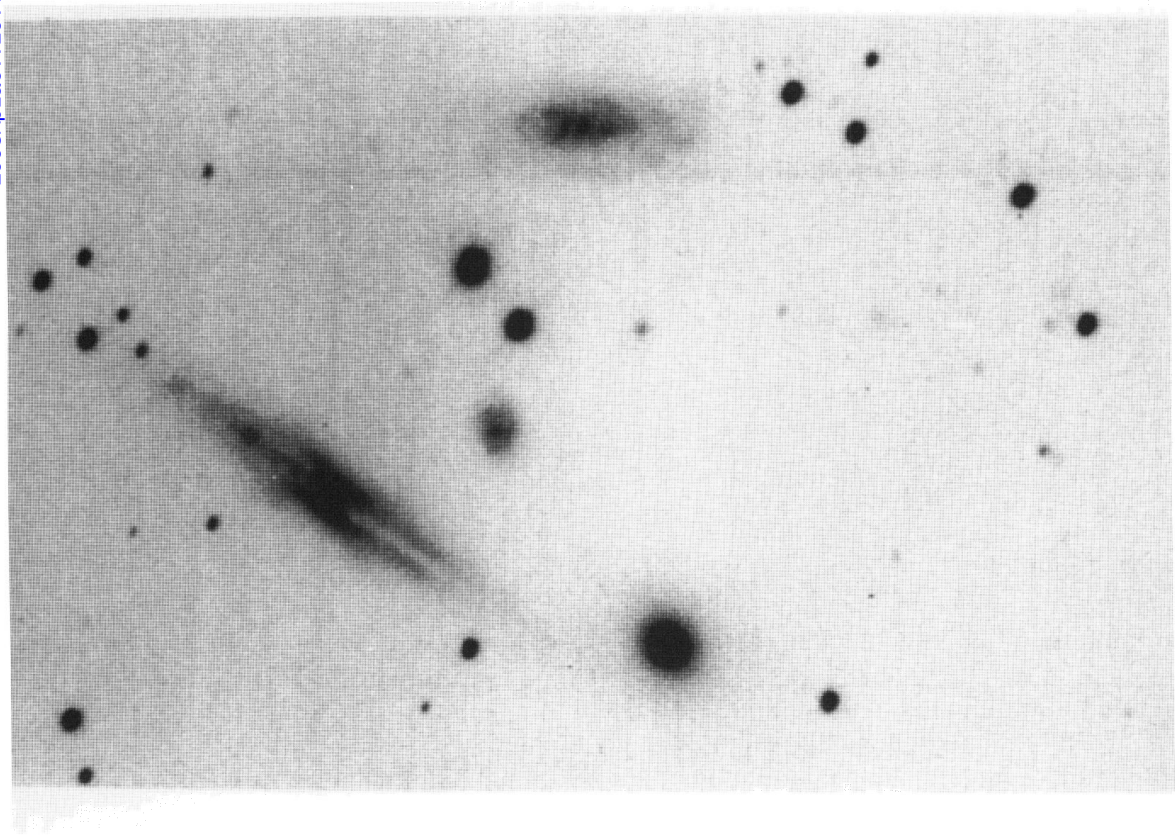
Group 87 is a triplet with a small superimposed higher-redshift galaxy. A thin filament connects the two brightest galaxies (a and b).

GROUP DATA

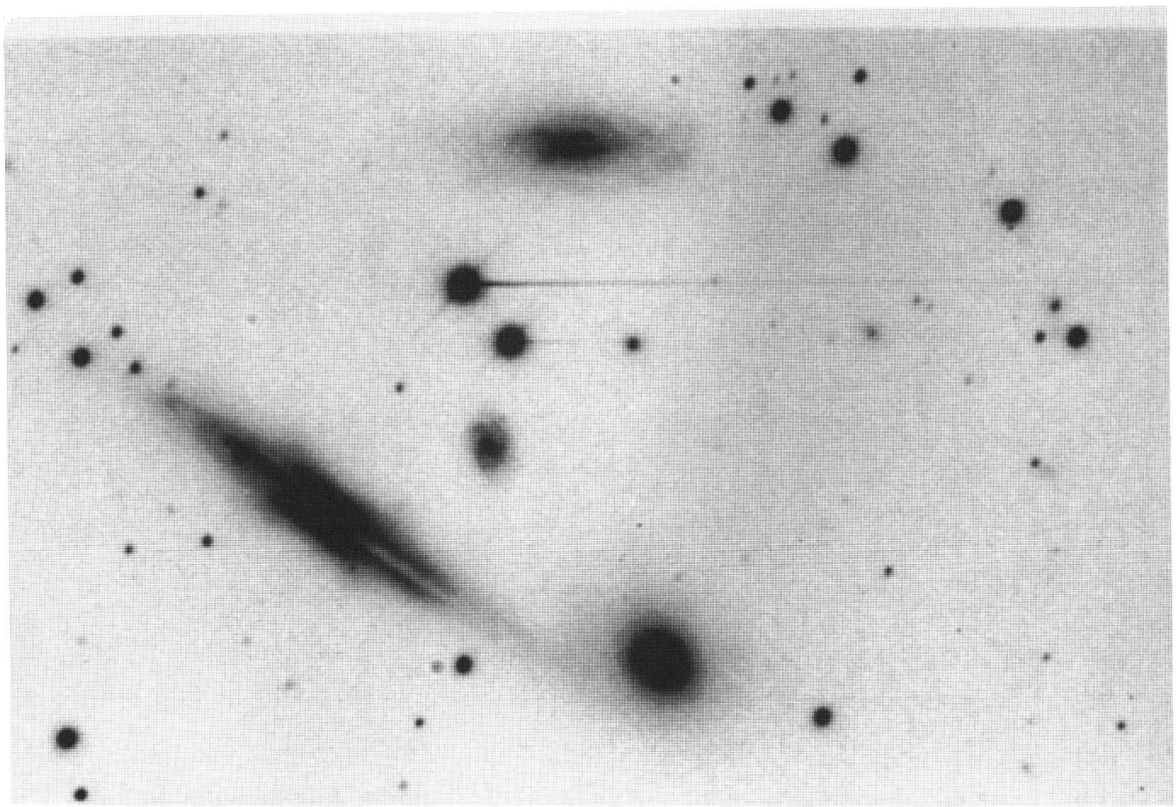
r.a. (1950)	(h m s)	20 45 20.82
dec. (1950)	(° ' ")	-20 01 52.8
galactic longitude	(°)	26.47
galactic latitude	(°)	-34.27
mean redshift		0.0296
total blue magnitude (B_{TC})		13.33
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	30.9
radial velocity dispersion	(km/s)	120.2
crossing time	(Ht_c)	0.0275
mass-to-light ratio	($M_\odot/L_\odot$)	6.9

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	45 23.0	45 19.0	45 20.2	45 21.1
δ	(' ")	02 05.3	02 29.8	01 02.1	01 53.9
v	(km/s)	8694	8972	8920	10200
Δv	(km/s)	35	65	133	160
T		Sbc	S0	Sd	Sd
a	(")	39.80	17.50	21.40	7.80
b	(")	9.10	14.10	9.10	5.80
B_{TC}		13.97	15.10	15.02	16.89
$B-R$		1.86	1.60	1.28	1.39
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

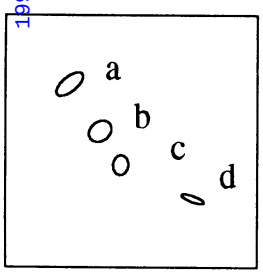


B



R

Group 88



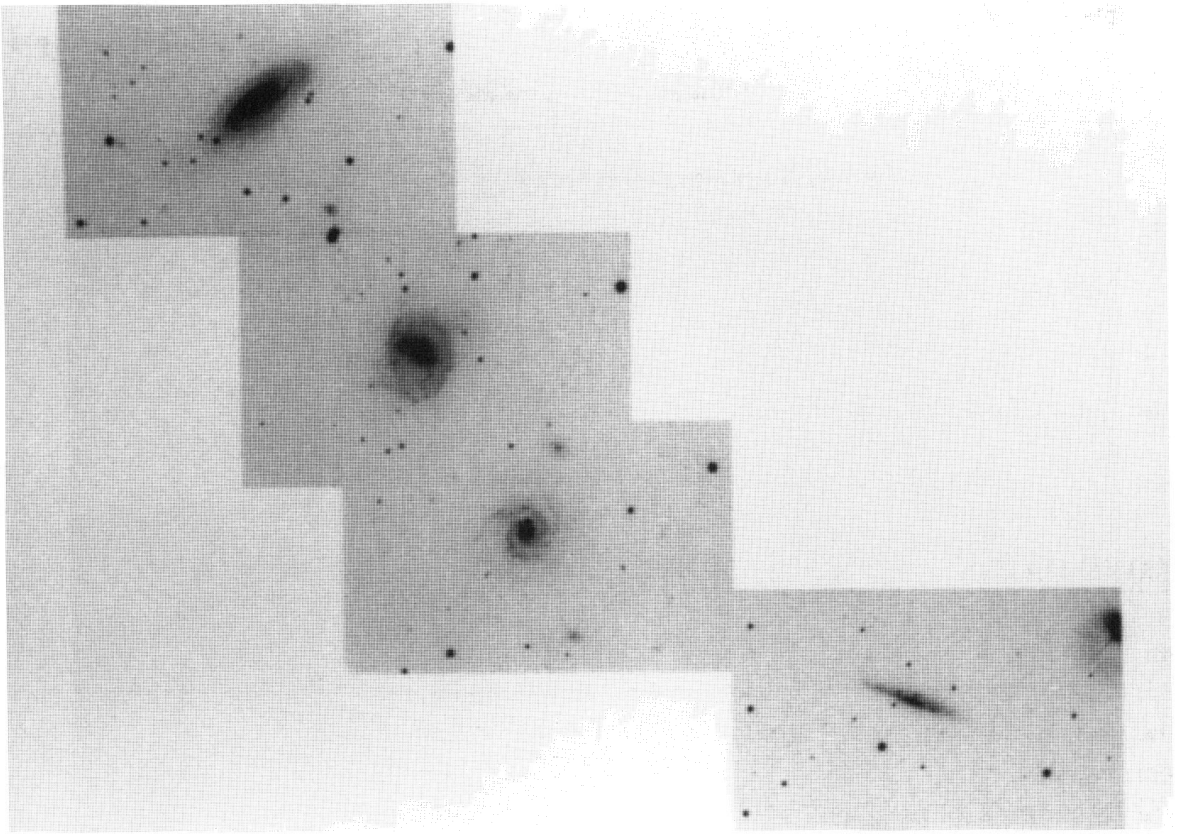
Group 88 is a relatively loose quartet of spiral galaxies. The brightest (a) is a radio and infrared source. The faintest galaxy (d) is a weak radio source. This group has a very small velocity dispersion.

GROUP DATA

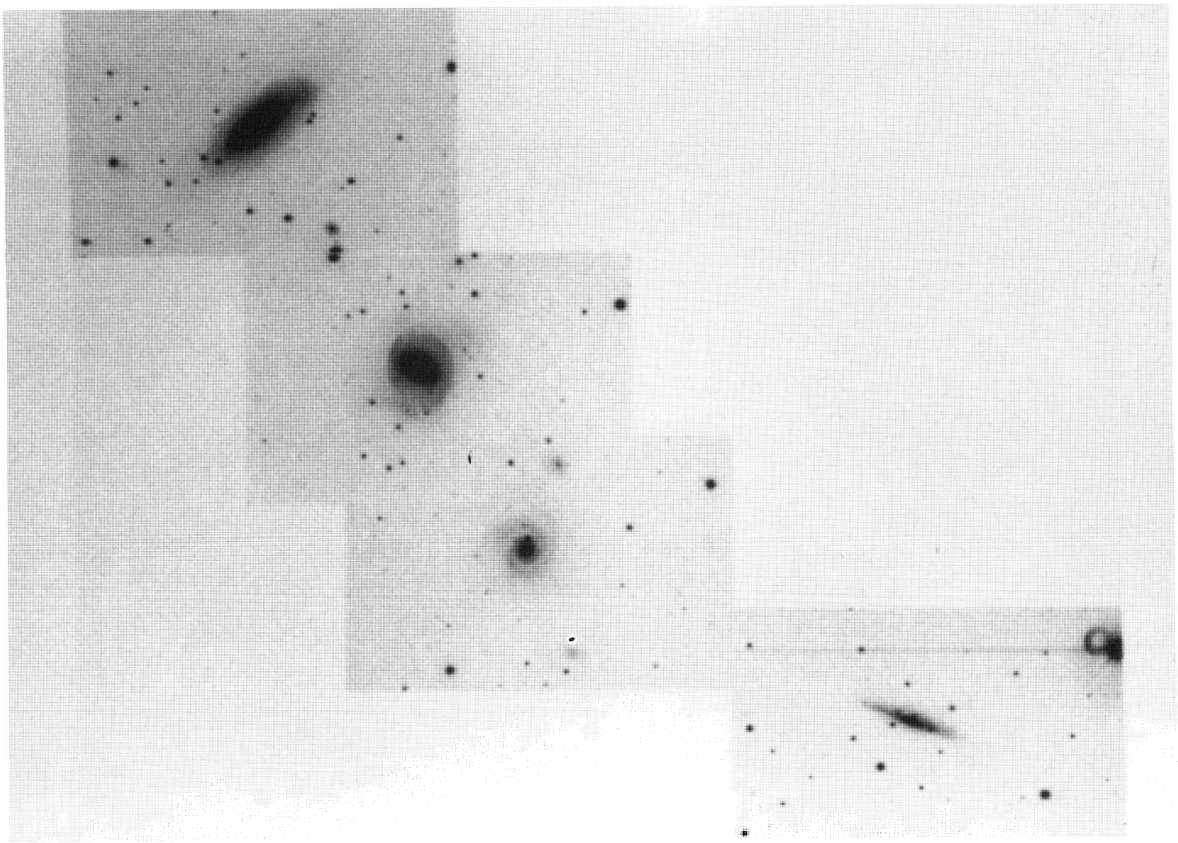
r.a. (1950)	(h m s)	20 49 47.15
dec. (1950)	(° ' ")	-05 56 45.4
galactic longitude	(°)	42.14
galactic latitude	(°)	-29.46
mean redshift		0.0201
total blue magnitude (B_{TC})		12.07
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	67.6
radial velocity dispersion	(km/s)	26.9
crossing time	(Ht_c)	8.7096
mass-to-light ratio	($M_\odot/L_\odot$)	

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	49 55.6	49 51.0	49 47.2	49 33.9
δ	(' ")	53 59.7	56 08.5	57 40.8	59 12.7
v	(km/s)	6033	6010	6083	6032
Δv	(km/s)	25	22	26	59
T		Sb	SBb	Sc	Sc
a	(")	45.10	34.00	27.60	32.70
b	(")	20.20	26.50	21.00	8.50
B_{TC}		13.18	13.24	13.87	14.49
$B-R$		1.56	1.5	0.99	1.31
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)	2.22			
$\log F_{20cm}$	(mJy)	1.45		0.43	
name		N6978	N6977	N6976	N6975

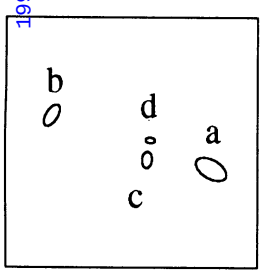


B



R

Group 89



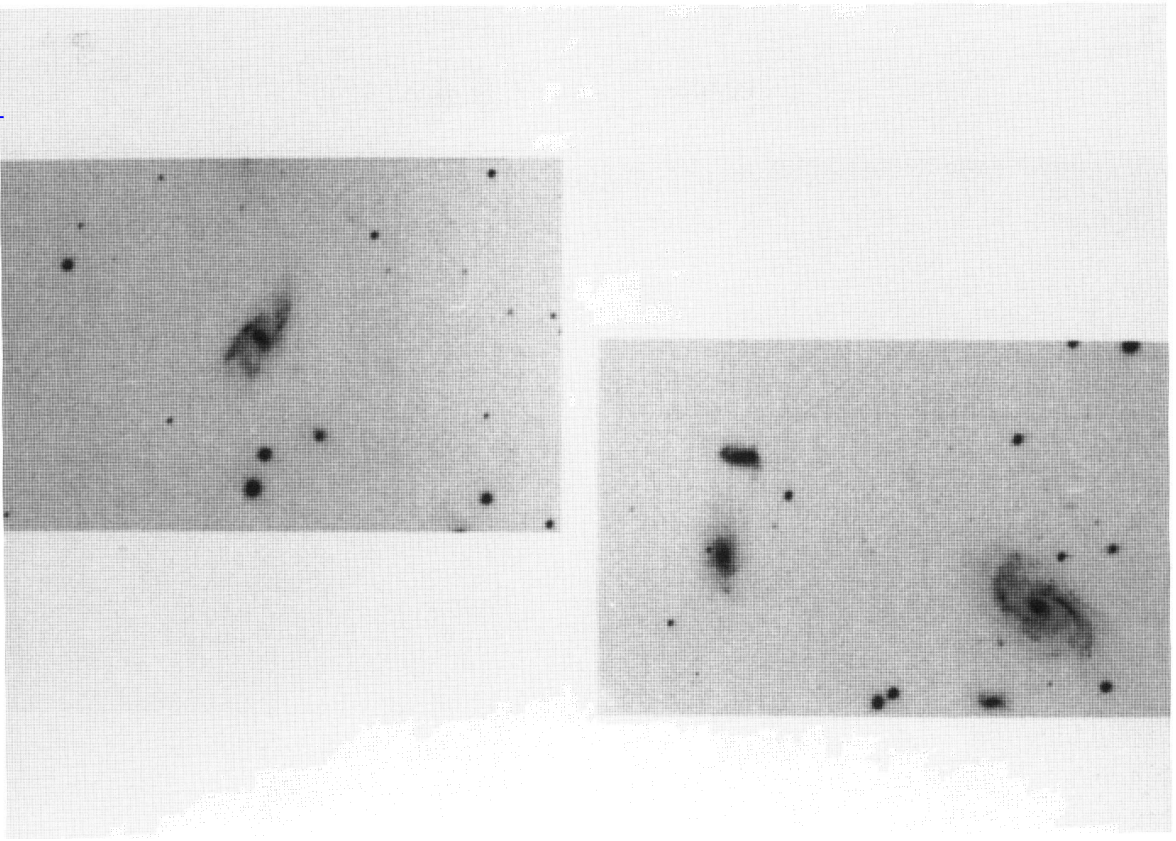
Group 89 is a loose quartet of spiral galaxies. It has a relatively long crossing time.

GROUP DATA

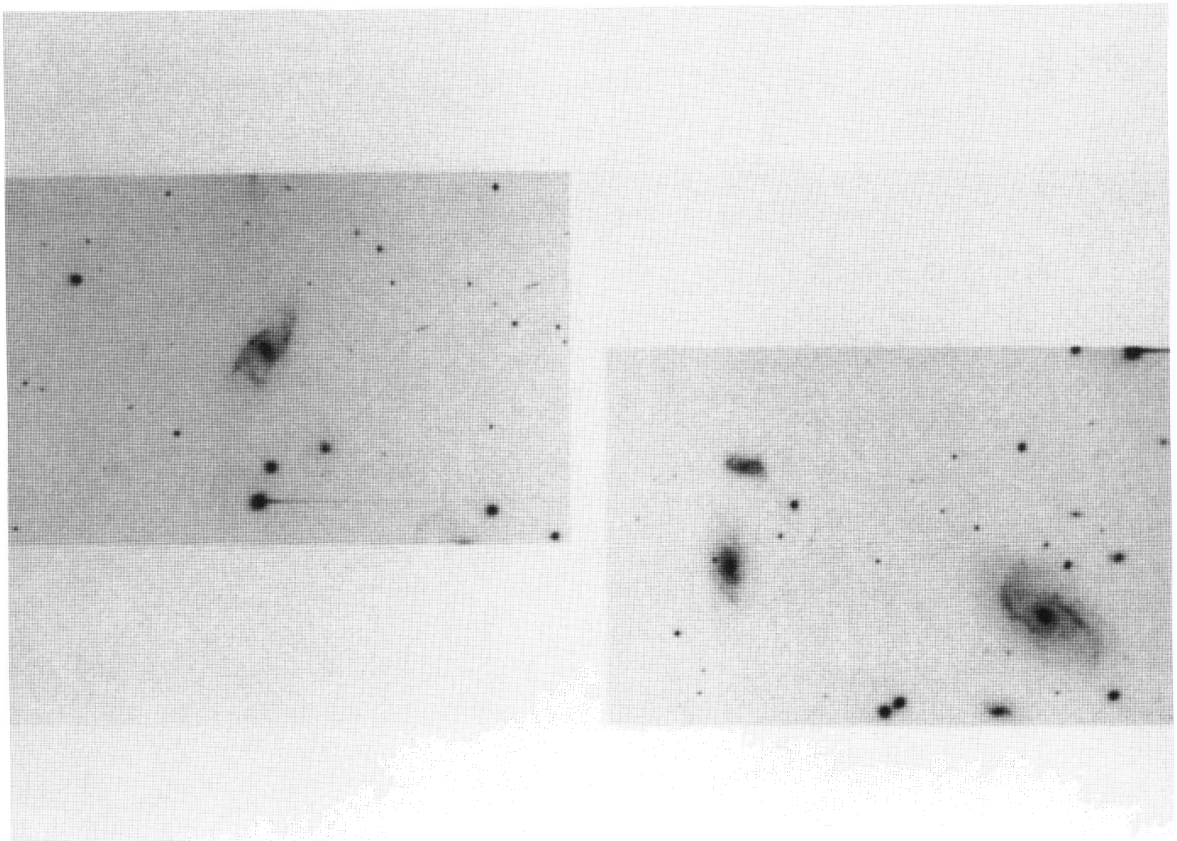
r.a. (1950)	(h m s)	21 17 32.39
dec. (1950)	(° ' ")	-04 07 24.9
galactic longitude	(°)	48.01
galactic latitude	(°)	-34.59
mean redshift		0.0297
total blue magnitude (B_{TC})		13.41
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	58.9
radial velocity dispersion	(km/s)	55.0
crossing time	(Ht_c)	0.1445
mass-to-light ratio	($M_\odot/L_\odot$)	6.5

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	17 24.3	17 42.5	17 31.6	17 31.2
δ	(' ")	08 04.4	06 31.8	07 48.7	07 14.6
v	(km/s)	8850	8985	8872	8857
Δv	(km/s)	61	45	40	32
T		Sc	SBc	Scd	Sm
a	(")	29.10	20.90	14.40	8.10
b	(")	16.10	10.20	8.60	5.10
B_{TC}		14.10	14.88	15.52	16.27
$B-R$		1.16	1.01	1.11	0.80
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{20cm}$	(mJy)				
name					

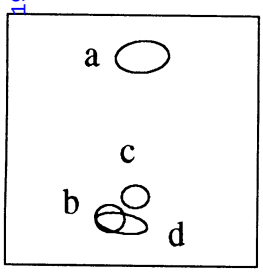


B



R

Group 90



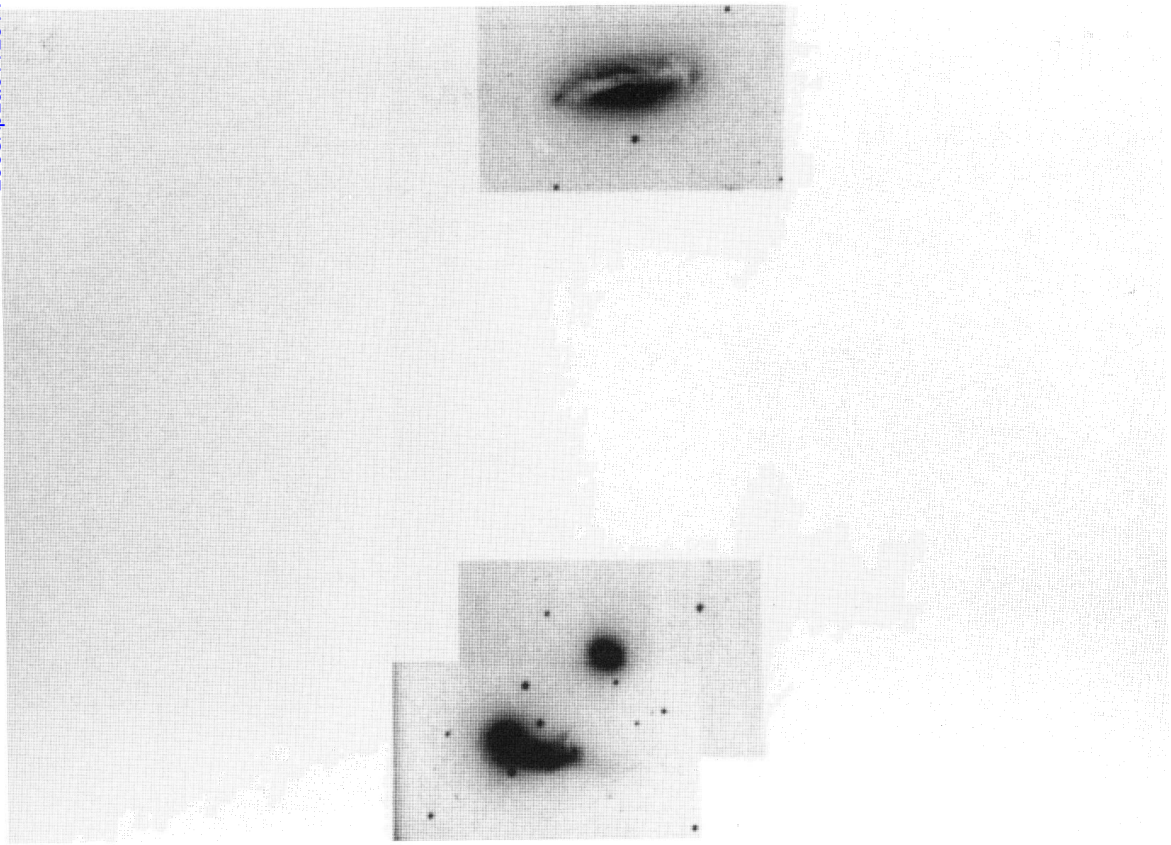
Group 90 is an interesting quartet of interacting galaxies. Galaxies b and d overlap; a and d are infrared sources.

GROUP DATA

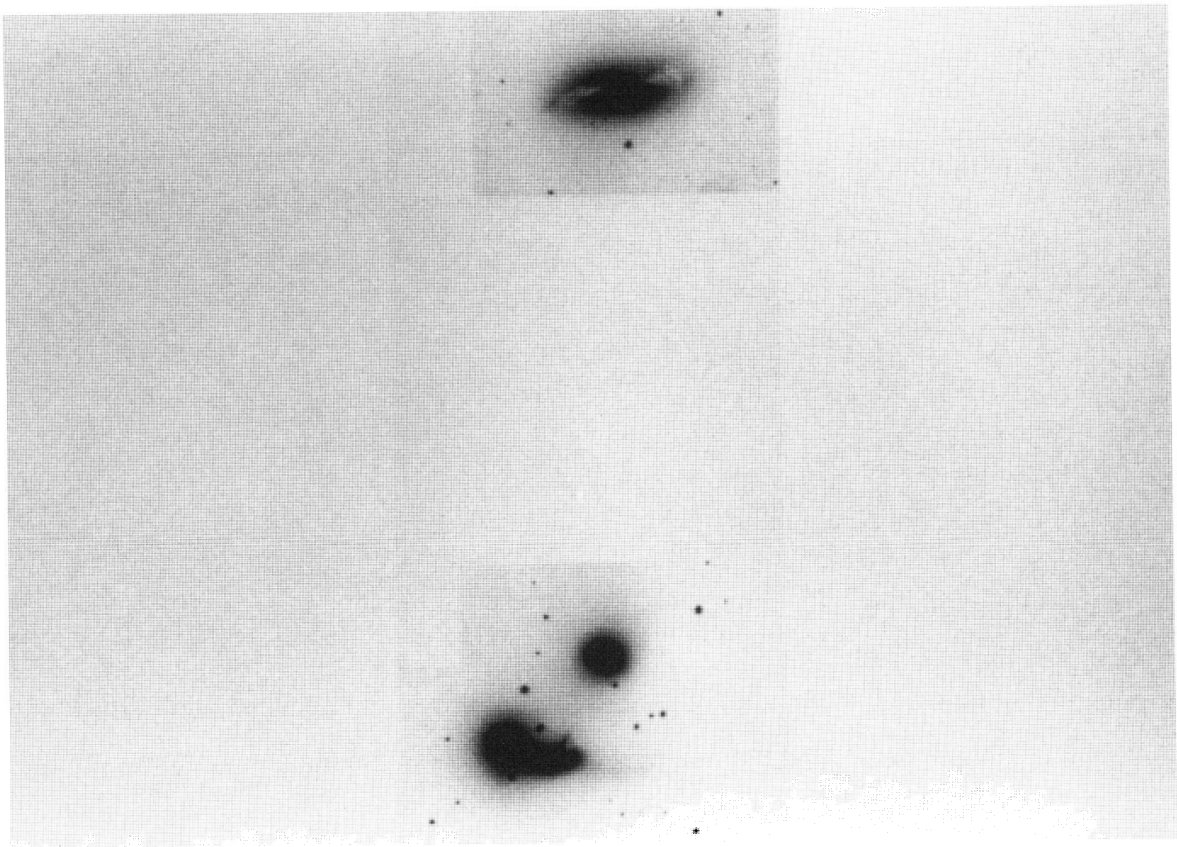
r.a. (1950)	(h m s)	21 59 10.51
dec. (1950)	(° ' ")	-32 11 56.1
galactic longitude	(°)	14.98
galactic latitude	(°)	-53.08
mean redshift		0.0088
total blue magnitude (B_{TC})		11.10
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	29.5
radial velocity dispersion	(km/s)	100.0
crossing time	(Ht_c)	0.0224
mass-to-light ratio	($M_\odot/L_\odot$)	12.3

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	59 07.6	59 14.1	59 08.8	59 11.6
δ	(' ")	43.20	36.40	30.40	26.30
v	(km/s)	2575	2525	2696	2778
Δv	(km/s)	28	29	24	29
T		Sa	E0	E0	Im
a	(")	71.80	39.90	36.60	69.30
b	(")	43.20	36.40	30.40	26.30
B_{TC}		12.36	12.57	12.73	12.81
$B-R$		1.60	1.64	2.23	1.83
$\log F_{60\mu}$	(Jy)	5.85			3.43
$\log F_{100\mu}$	(Jy)	12.81			7.76
$\log F_{20cm}$	(mJy)				
name		N7172	N7176	N7173	N7174

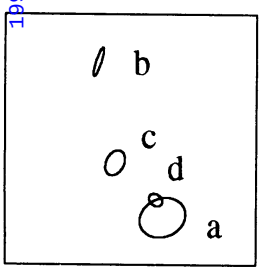


B



R

Group 91



Group 91 is a quartet containing an interacting pair (a and d). Both galaxies in the pair are infrared emitters.

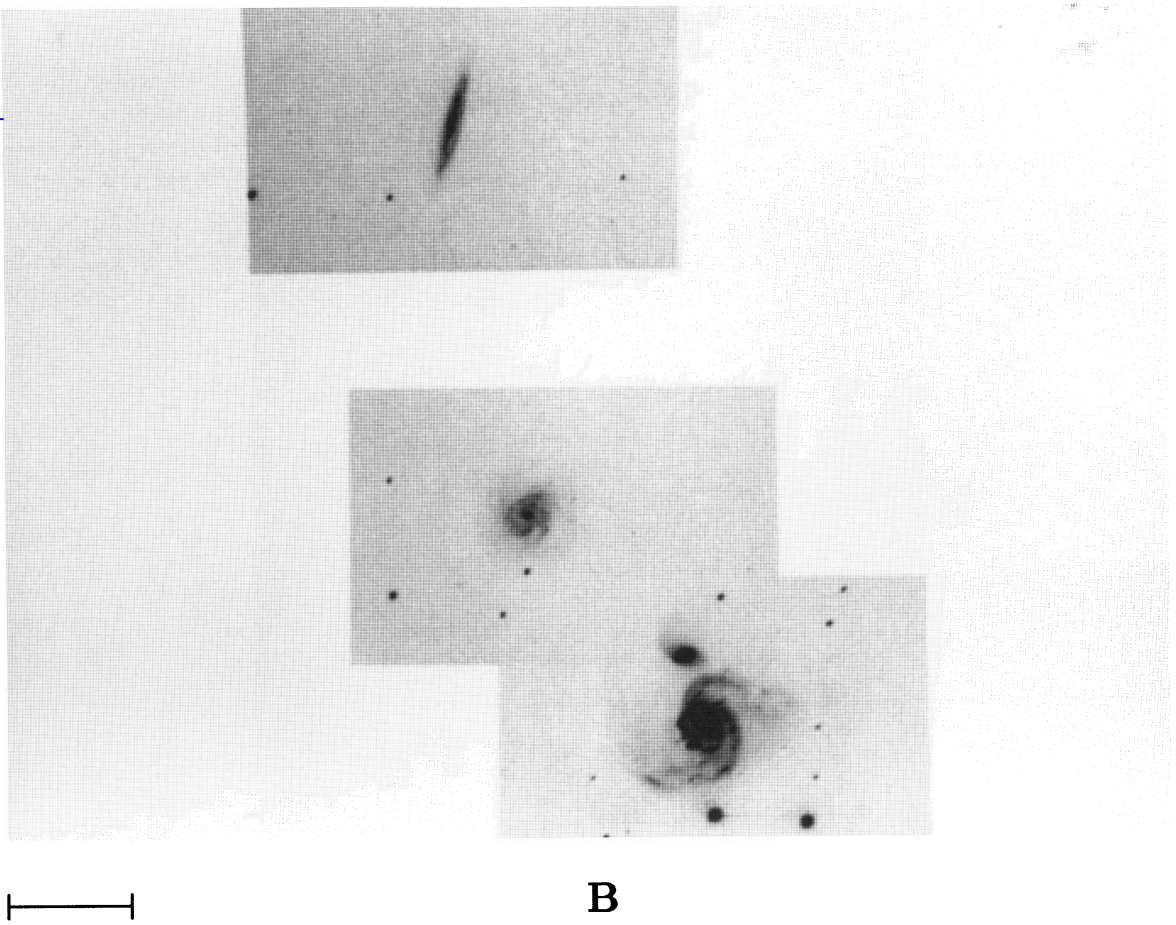
GROUP DATA

r.a. (1950)	(h m s)	22 06 21.25
dec. (1950)	(° ' ")	-28 01 36.6
galactic longitude	(°)	22.27
galactic latitude	(°)	-54.17
mean redshift		0.0238
total blue magnitude (B_{TC})		12.22
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	52.5
radial velocity dispersion	(km/s)	182.0
crossing time	(Ht_c)	0.0219
mass-to-light ratio	($M_\odot/L_\odot$)	23.4

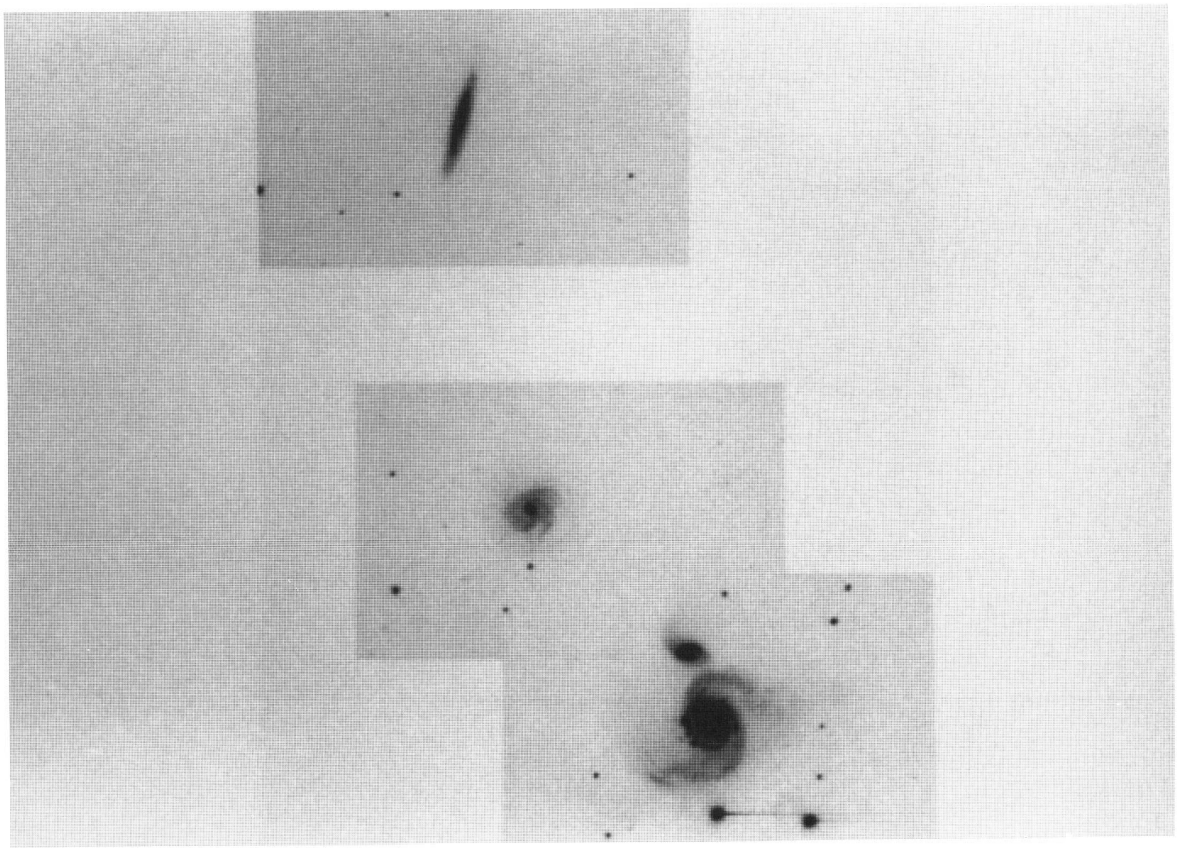
GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	06 17.2	06 26.0	06 23.7	06 18.1
δ[1]	(' ")	03 19.9	58 37.6	01 41.4	02 47.6
v	(km/s)	6832	7196	7319	7195
Δv	(km/s)	40	66	49	41
T		SBc	Sc	Sc	SB0
a	(")	43.20	28.00	23.90	13.40
b	(")	35.00	5.10	16.40	10.20
B_{TC}		12.62	14.63	14.47	14.99
$B-R$		1.09	1.43	1.08	1.37
$\log F_{60\mu}$	(Jy)	2.10	1.99		
$\log F_{100\mu}$	(Jy)	5.03	3.23		
$\log F_{20cm}$	(mJy)				
name		N7214			

1. degree for 91b is -27.

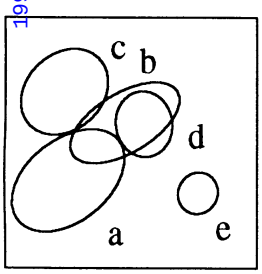


B



R

Group 92



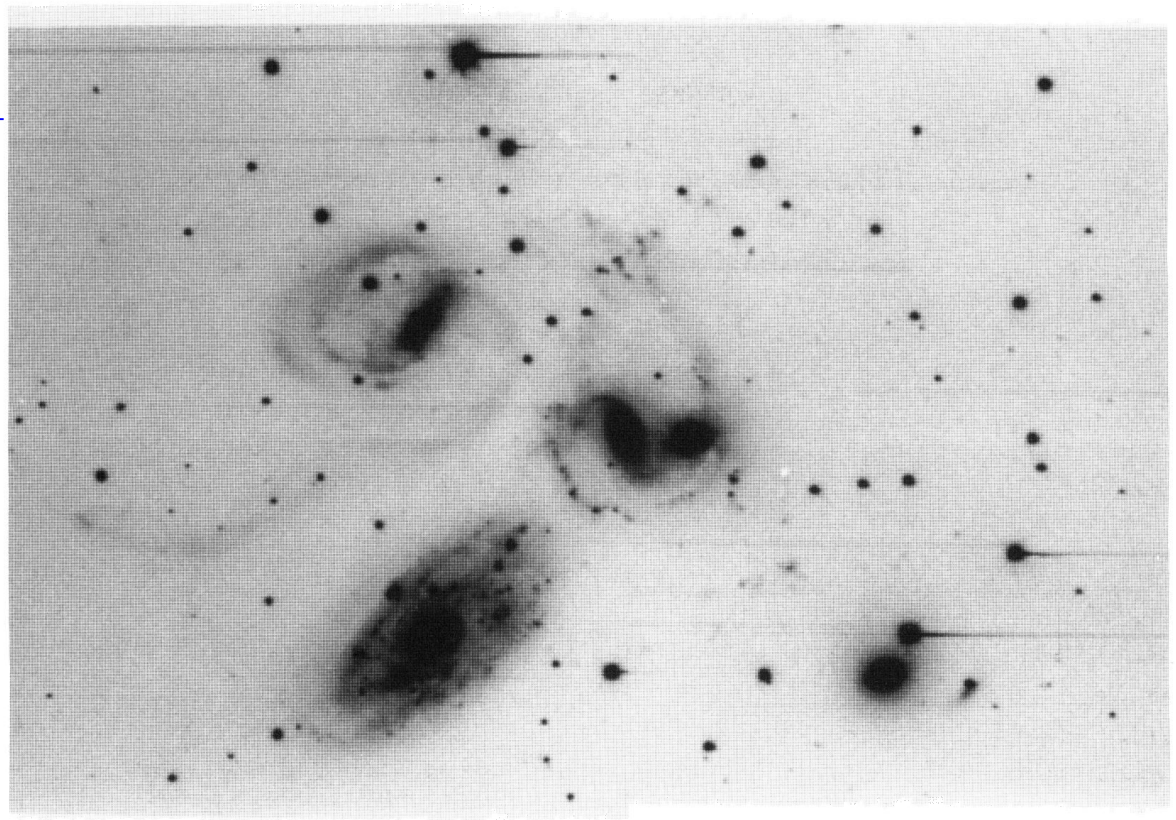
This is the famous group Stephan's Quintet, also Arp 319 and VV 228. It consists of a compact quartet plus a bright, lower redshift, spiral galaxy (a). The quartet has a relatively high velocity dispersion and a short crossing time. The distorted spiral galaxy (c) is an infrared and radio source.

GROUP DATA

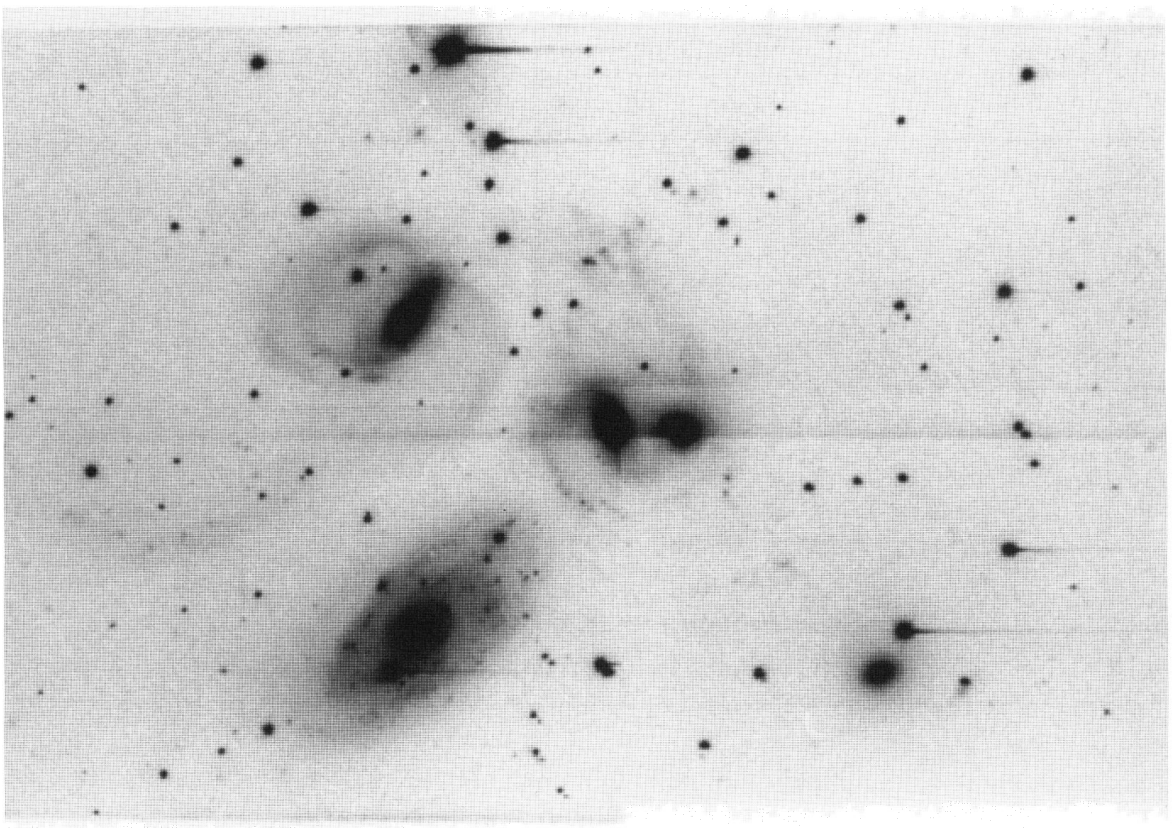
r.a. (1950)	(h m s)	22 33 41.49
dec. (1950)	(° ' ")	+33 42 02.2
galactic longitude	(°)	93.26
galactic latitude	(°)	-20.99
mean redshift		0.0215
total blue magnitude (B_{TC})		11.47
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	28.2
radial velocity dispersion	(km/s)	389.1
crossing time	(Ht_c)	0.0054
mass-to-light ratio	($M_\odot/L_\odot$)	43.7

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	33 46.0	33 41.1	33 46.3	33 39.4	33 34.7
δ	(' ")	41 20.6	42 23.7	42 57.4	42 22.3	41 07.0
v	(km/s)	786	5774	6764	6630	6599
Δv	(km/s)	20	24	28	23	26
T		Sd	Sbc	SBa	SB0	Sa
a	(")	69.80	66.60	52.80	36.60	22.90
b	(")	44.20	32.90	41.50	30.70	21.20
B_{TC}		12.53	13.18	13.33	13.63	14.01
$B-R$		1.09	1.43	1.62	1.23	1.16
$\log F_{60\mu}$	(Jy)			0.64		
$\log F_{100\mu}$	(Jy)			2.89		
$\log F_{20cm}$	(mJy)			23.04	0.80	
name		N7320	N7318B	N7319	N7318A	N7317

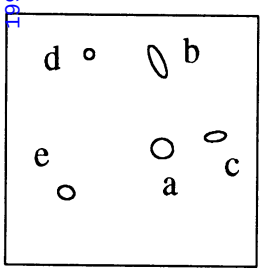


B



R

Group 93



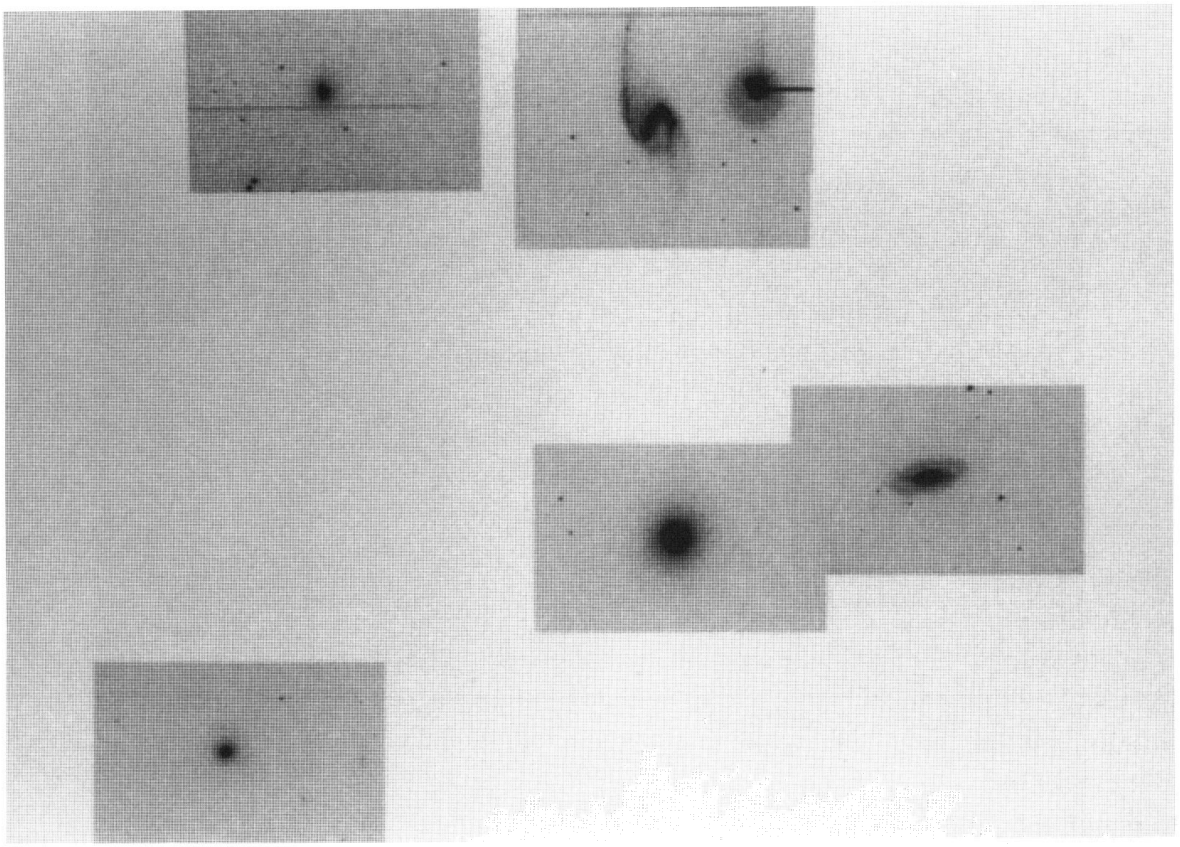
This group (Arp 99) consists of an accordant quartet plus a fainter high-redshift galaxy (d). The bright spiral galaxy (b) has two long extended spiral arms suggestive of tidal interaction. It is a radio and infrared source. The bright elliptical galaxy (a) is also a radio source.

GROUP DATA

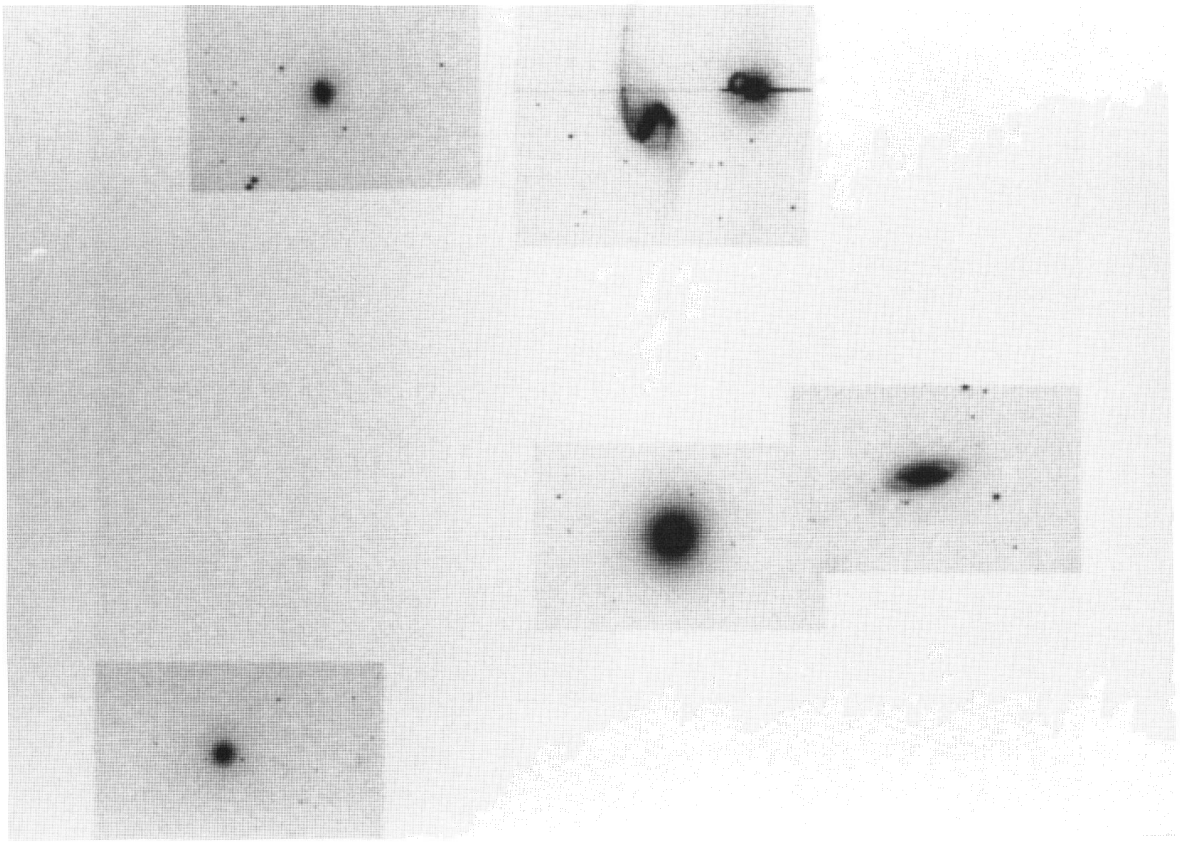
r.a. (1950)	(h m s)	23 12 52.44
dec. (1950)	(° ' ")	+18 42 57.2
galactic longitude	(°)	93.54
galactic latitude	(°)	-38.34
mean redshift		0.0168
total blue magnitude (B_{TC})		11.83
number of galaxies		5
number of accordant galaxies		4
median galaxy separation	(kpc)	70.8
radial velocity dispersion	(km/s)	208.9
crossing time	(Ht_c)	0.0257
mass-to-light ratio	($M_\odot/L_\odot$)	85.1

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	12 46.8	12 48.0	12 34.4	13 03.9	13 09.1
δ	(' ")	41 19.2	46 07.6	42 01.3	46 30.1	38 47.9
v	(km/s)	5140	4672	5132	5173	8881
Δv	(km/s)	31	38	33	34	39
T		E1	SBd	SBa	SB0	Sa
a	(")	36.20	57.40	35.90	16.90	27.10
b	(")	33.40	19.50	15.90	16.50	21.80
B_{TC}		12.61	13.18	13.94	15.27	15.40
$B-R$		1.60	1.30	1.79	1.83	1.87
$\log F_{60\mu}$	(Jy)		1.84			
$\log F_{100\mu}$	(Jy)		4.52			
$\log F_{20cm}$	(mJy)	43.94	7.98			
name		N7550	N7594	N7547		

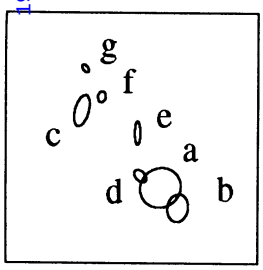


B



R

Group 94



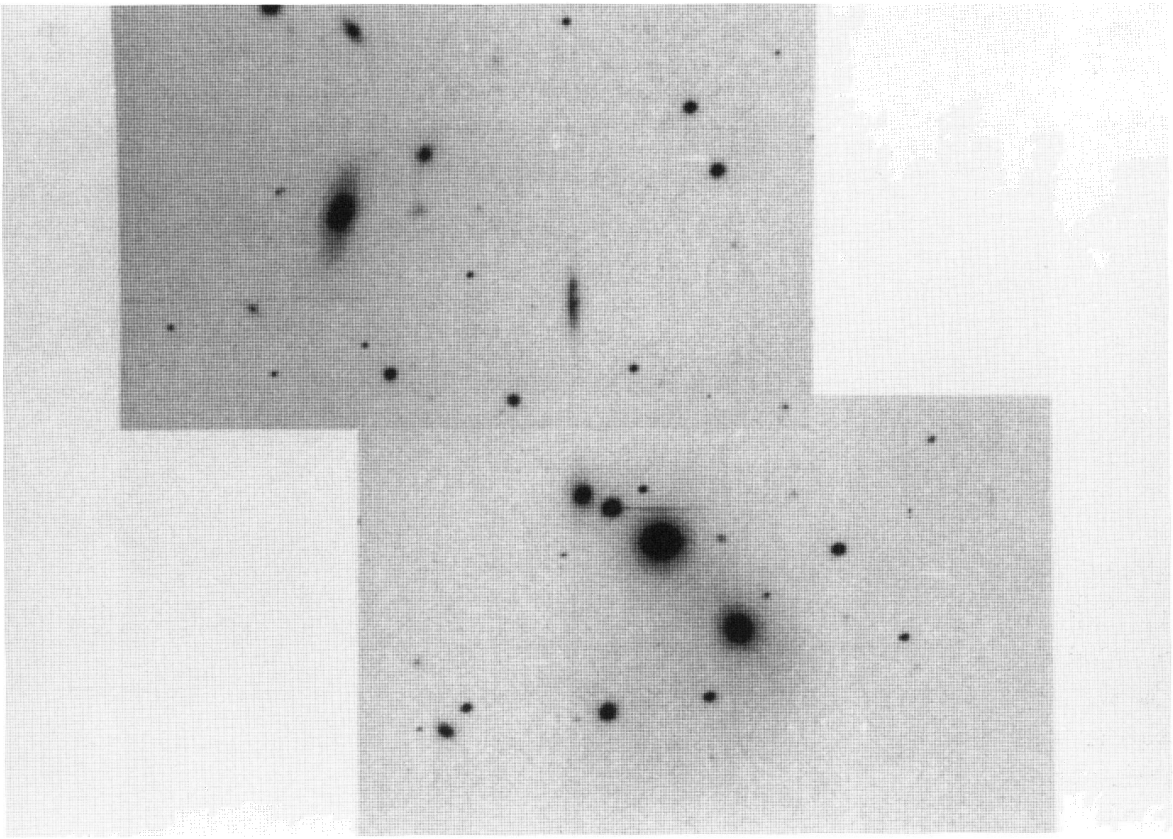
Group 94 (Arp 170) is a septet of accordant-redshift galaxies. It contains two bright elliptical galaxies (a and b) and small S0 galaxy (d) within an extended common envelope. The brightest elliptical galaxy (a) is a radio source. Galaxies b and e have weak radio emission. The group has a high velocity dispersion and a short crossing time.

GROUP DATA

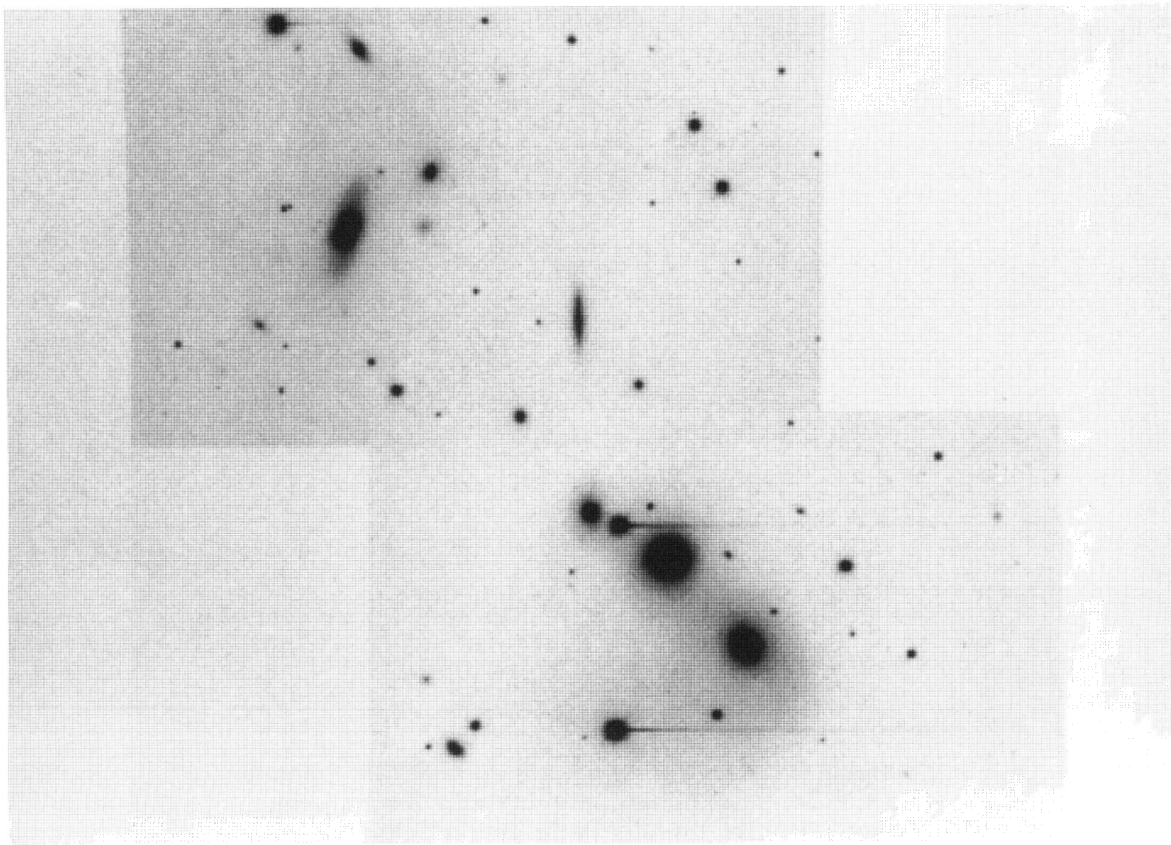
r.a. (1950)	(h m s)	23 14 46.96
dec. (1950)	(° ' ")	+18 27 03.4
galactic longitude	(°)	93.90
galactic latitude	(°)	-38.78
median redshift		0.0417
total blue magnitude (B_{TC})		13.12
number of galaxies		7
number of accordant galaxies		7
median galaxy separation	(kpc)	57.5
radial velocity dispersion	(km/s)	478.6
crossing time	(Ht_c)	0.0089
mass-to-light ratio	($M_\odot/L_\odot$)	158.5

GALAXY DATA

Galaxy:		a	b	c	d	e	f	g
α	(m s)	14 44.0	14 42.5	14 50.8	14 45.8	14 46.0	14 49.1	14 50.5
δ	(' ")	26 04.4	25 39.5	27 39.7	26 18.7	27 12.1	27 57.0	28 32.6
v	(km/s)	12040	11974	12120	13009	12250	12920	13200
Δv	(km/s)	42	37	52	42	103	108	114
T		E1	E3	S0	S0	Sd	S0	S0
a	(")	25.90	17.30	20.10	9.30	14.80	7.00	5.90
b	(")	23.90	12.80	8.60	5.80	3.70	5.00	3.30
B_{TC}		13.91	14.53	15.58	15.79	16.90	17.78	17.96
$B-R$		1.76	1.63	1.83	1.65	1.66	1.76	1.76
$\log F_{60\mu}$	(Jy)							
$\log F_{100\mu}$	(Jy)							
$\log F_{20cm}$	(mJy)	25.93	0.20			0.28		
name		N7578B	N7578A					

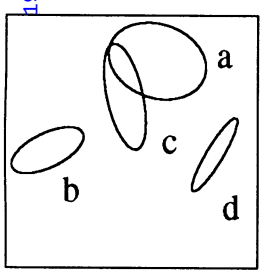


B



R

Group 95



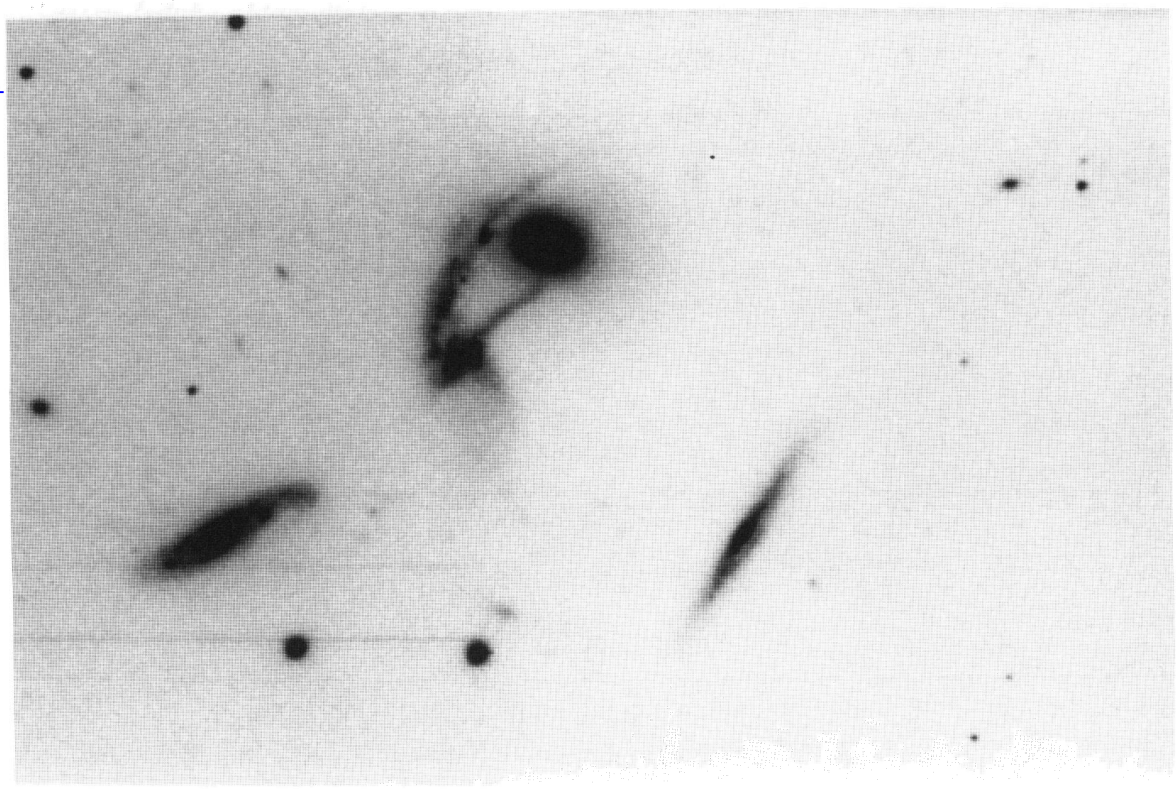
This quartet (Arp 150, VV 20) contains an interacting pair (a and c) connected by two filaments. Galaxies b and d are radio sources and d is an infrared source.

GROUP DATA

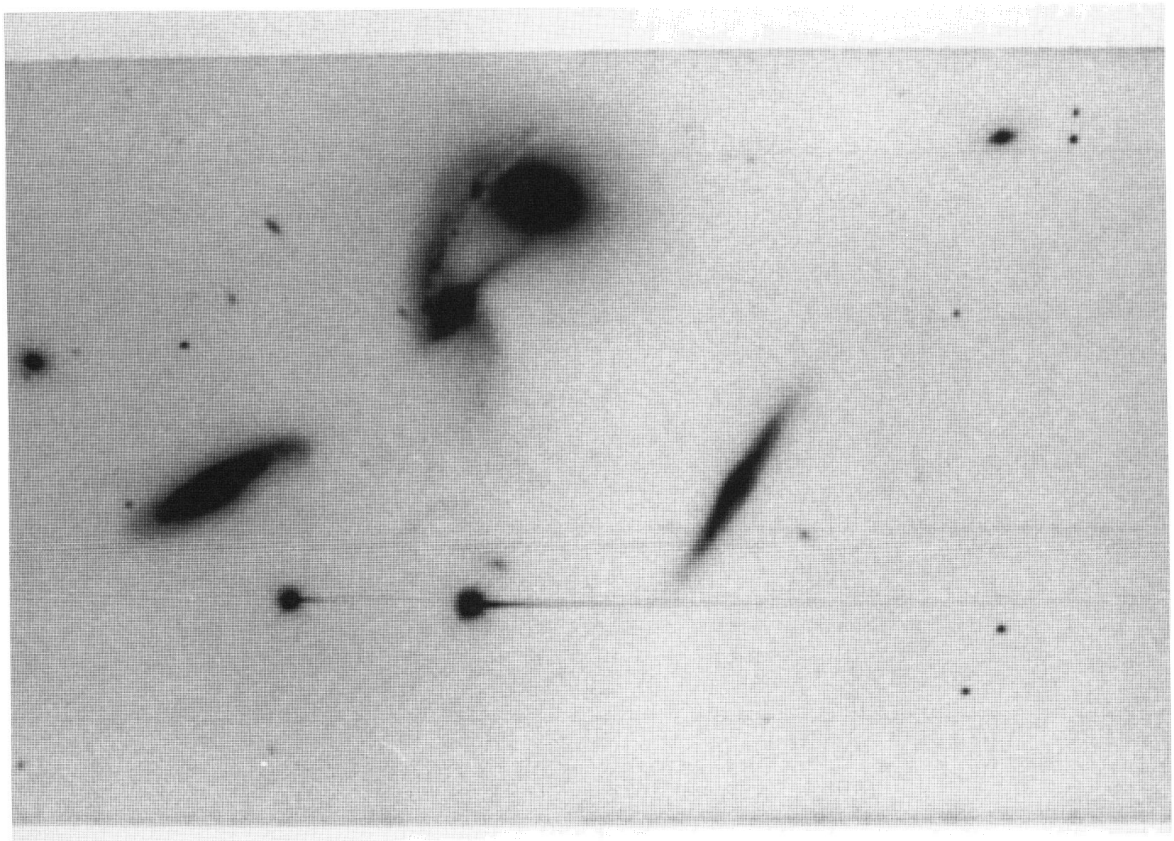
r.a. (1950)	(h m s)	23 16 58.92
dec. (1950)	(° ' ")	+09 13 34.3
galactic longitude	(°)	88.46
galactic latitude	(°)	-47.13
mean redshift		0.0396
total blue magnitude (B_{TC})		13.60
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	30.2
radial velocity dispersion	(km/s)	309.0
crossing time	(Ht_c)	0.0074
mass-to-light ratio	($M_\odot/L_\odot$)	50.1

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	16 58.2	17 02.0	16 59.3	16 56.1
δ	(' ")	14 02.9	13 16.0	13 44.2	13 14.0
v	(km/s)	11888	11637	11562	12350
Δv	(km/s)	45	48	40	97
T		E3	Scd	Sm	Sc
a	(")	26.30	20.70	28.40	22.10
b	(")	19.50	8.90	9.40	4.40
B_{TC}		14.42	15.34	15.20	16.14
$B-R$		1.70	1.44	1.51	1.77
$\log F_{60\mu}$	(Jy)				0.92
$\log F_{100\mu}$	(Jy)				2.30
$\log F_{20cm}$	(mJy)		2.46		5.40
name		N7609			

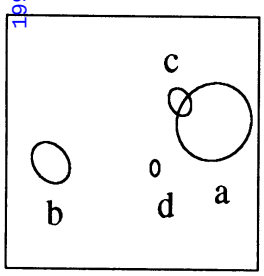


B



R

Group 96



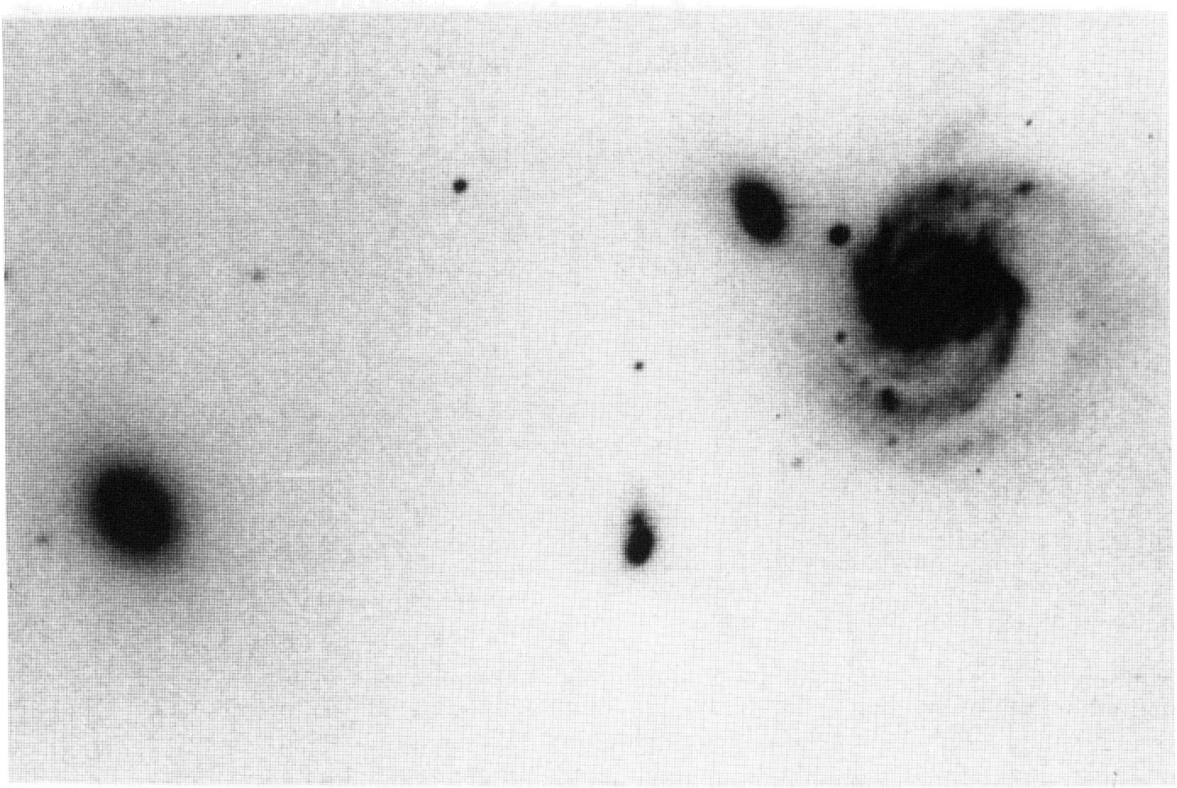
Group 96 (Arp 182, VV 343) is a quartet containing a bright spiral galaxy (a) with a close companion (c). The bright galaxy has infrared and strong radio emission, and its companion is a weak radio source. Two other small galaxies are found in the vicinity of the group, to the west.

GROUP DATA

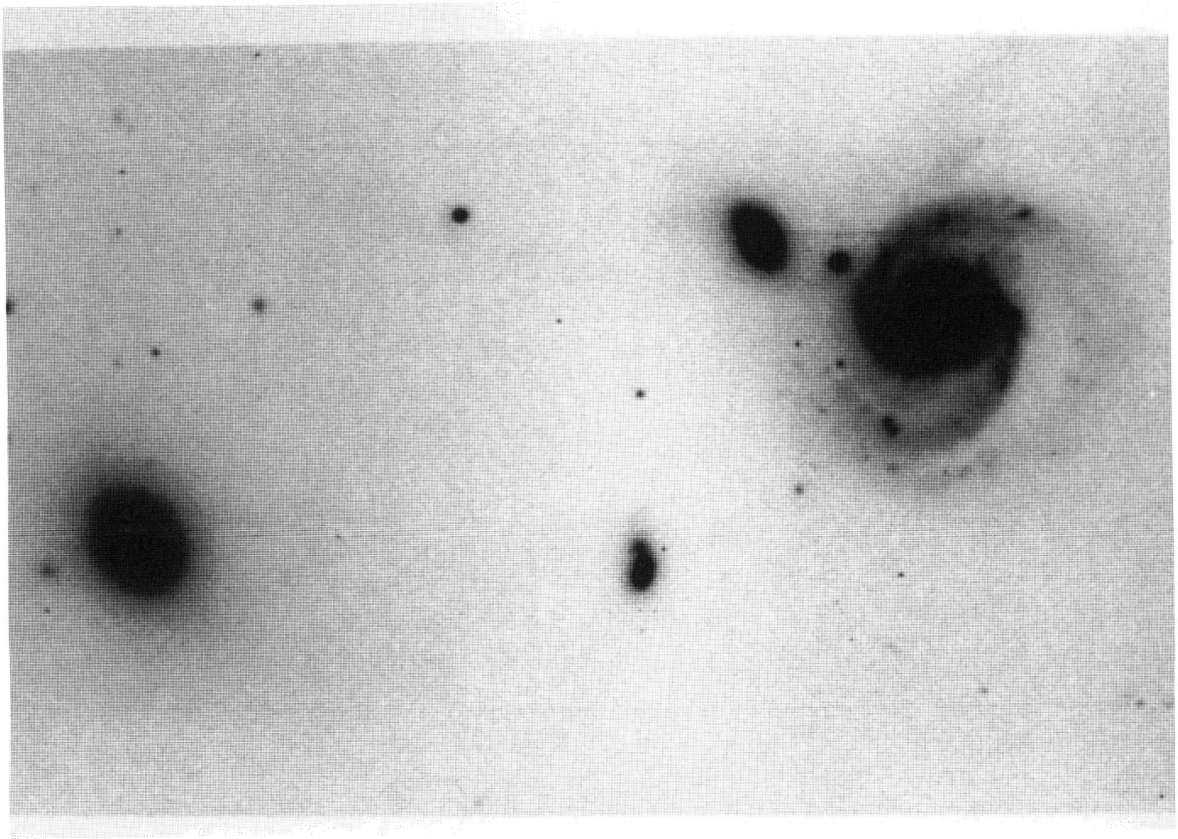
r.a. (1950)	(h m s)	23 25 28.19
dec. (1950)	(° ' ")	+08 29 55.4
galactic longitude	(°)	90.64
galactic latitude	(°)	-48.80
median redshift		0.0292
total blue magnitude (B_{TC})		13.01
number of galaxies		4
number of accordant galaxies		4
median galaxy separation	(kpc)	30.2
radial velocity dispersion	(km/s)	131.8
crossing time	(Ht_c)	0.0174
mass-to-light ratio	($M_\odot/L_\odot$)	14.8

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	25 24.6	25 33.8	25 26.5	25 27.9
δ	(' ")	30 09.9	29 34.5	30 26.4	29 30.7
v	(km/s)	8698	8616	8753	8975
Δv	(km/s)	25	42	35	57
T		Sc	E2	Sa	Im
a	(")	33.30	18.70	12.20	6.60
b	(")	30.60	14.10	8.80	3.70
B_{TC}		13.53	14.49	15.69	16.56
$B-R$		1.33	1.68	1.61	0.97
$\log F_{60\mu}$	(Jy)	5.47			
$\log F_{100\mu}$	(Jy)	8.19			
$\log F_{20cm}$	(mJy)	200.08		3.17	
name		N7674			

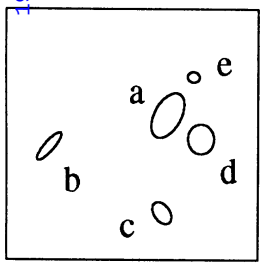


B



R

Group 97



Group 97 is a loose quintet with a relatively high velocity dispersion and mass-to-light ratio.

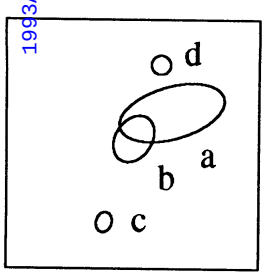
GROUP DATA

r.a. (1950)	(h m s)	23 44 50.71
dec. (1950)	(° ' ")	-02 35 26.4
galactic longitude	(°)	88.51
galactic latitude	(°)	-60.83
mean redshift		0.0218
total blue magnitude (B_{TC})		12.91
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	63.1
radial velocity dispersion	(km/s)	371.5
crossing time	(Ht_c)	0.0126
mass-to-light ratio	($M_\odot/L_\odot$)	346.7

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	44 49.1	45 03.9	44 49.8	44 44.9	44 45.9
δ	(' ")	34 43.9	35 42.3	37 45.6	35 28.3	33 32.1
v	(km/s)	6910	6940	5995	6239	6579
Δv	(km/s)	25	72	35	33	45
T		E5	Sc	Sa	E1	S0a
a	(")	45.90	34.10	23.30	11.60	
b	(")	25.00	9.10	14.80	24.70	9.80
B_{TC}		14.16	14.83	14.54	14.45	16.31
$B-R$		1.76	1.57	1.51	1.50	1.67
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name		I5357	I5359	I5356	I5351	

Group 98



Group 98 (Arp 323, VV 208) contains a close pair of galaxies (a and b) with a nearby companion. The faintest galaxy has a much higher redshift.

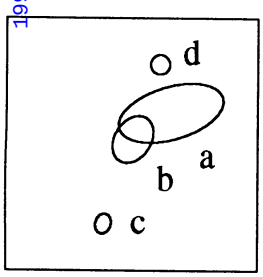
GROUP DATA

r.a. (1950)	(h m s)	23 51 37.99
dec. (1950)	(° ' ")	+00 05 57.7
galactic longitude	(°)	94.03
galactic latitude	(°)	-59.24
mean redshift		0.0266
total blue magnitude (B_{TC})		13.39
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	27.5
radial velocity dispersion	(km/s)	120.2
crossing time	(Ht_c)	0.0174
mass-to-light ratio	($M_\odot/L_\odot$)	23.4

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	51 36.4	51 38.5	51 40.1	51 37.0
δ	(' ")	06 16.3	05 54.1	04 43.4	06 56.9
v	(km/s)	7855	7959	8145	14950
Δv	(km/s)	20	26	33	67
T		SB0	S0	E2	Sc
a	(")	45.80	21.30	8.70	8.20
b	(")	22.10	15.40	6.70	8.20
B_{TC}		13.67	15.69	16.17	17.21
$B-R$		1.60	1.58	1.62	1.00
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{6cm}$	(mJy)				
$\log F_{20cm}$	(mJy)				
name		N7783A	N7783B		

Group 98



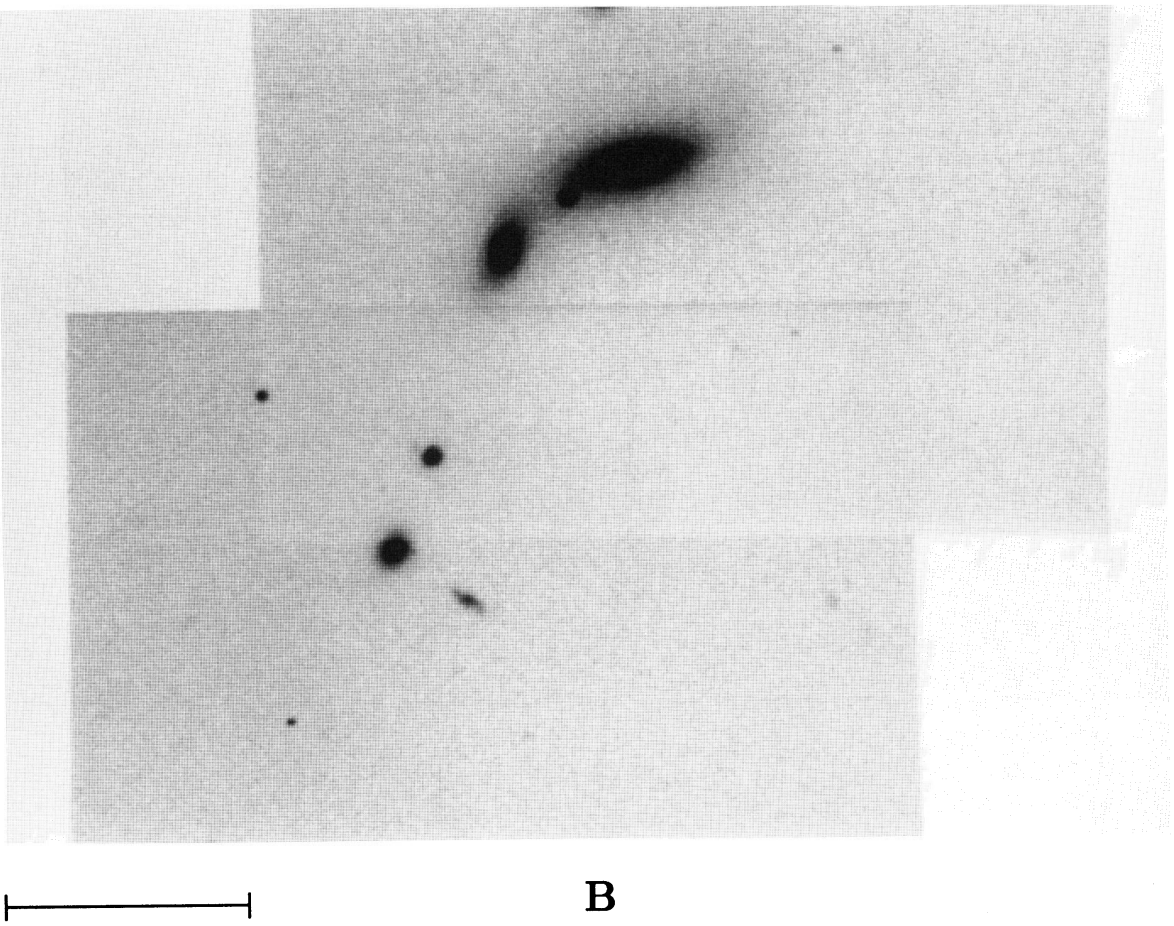
Group 98 (Arp 323, VV 208) contains a close pair of galaxies (a and b) with a nearby companion. The faintest galaxy has a much higher redshift.

GROUP DATA

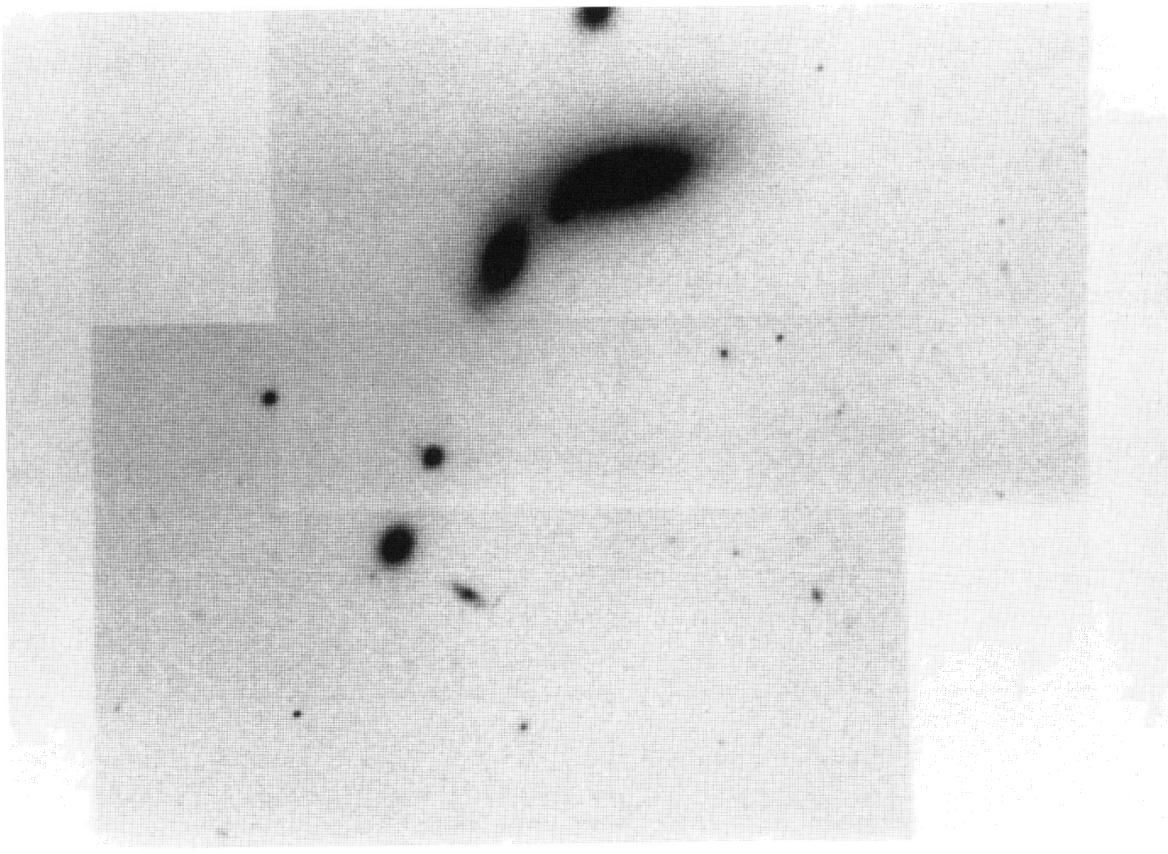
r.a. (1950)	(h m s)	23 51 37.99
dec. (1950)	(° ' ")	+00 05 57.7
galactic longitude	(°)	94.03
galactic latitude	(°)	-59.24
mean redshift		0.0266
total blue magnitude (B_{TC})		13.39
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	27.5
radial velocity dispersion	(km/s)	120.2
crossing time	(Ht_c)	0.0174
mass-to-light ratio	($M_\odot/L_\odot$)	23.4

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	51 36.4	51 38.5	51 40.1	51 37.0
δ	(' ")	06 16.3	05 54.1	04 43.4	06 56.9
v	(km/s)	7855	7959	8145	14950
Δv	(km/s)	20	26	33	67
T		SB0	S0	E2	Sc
a	(")	45.80	21.30	8.70	8.20
b	(")	22.10	15.40	6.70	8.20
B_{TC}		13.67	15.69	16.17	17.21
$B-R$		1.60	1.58	1.62	1.00
$\log F_{60\mu}$	(Jy)				
$\log F_{100\mu}$	(Jy)				
$\log F_{6cm}$	(mJy)				
$\log F_{20cm}$	(mJy)				
name		N7783A	N7783B		

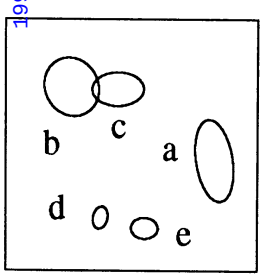


B



R

Group 99



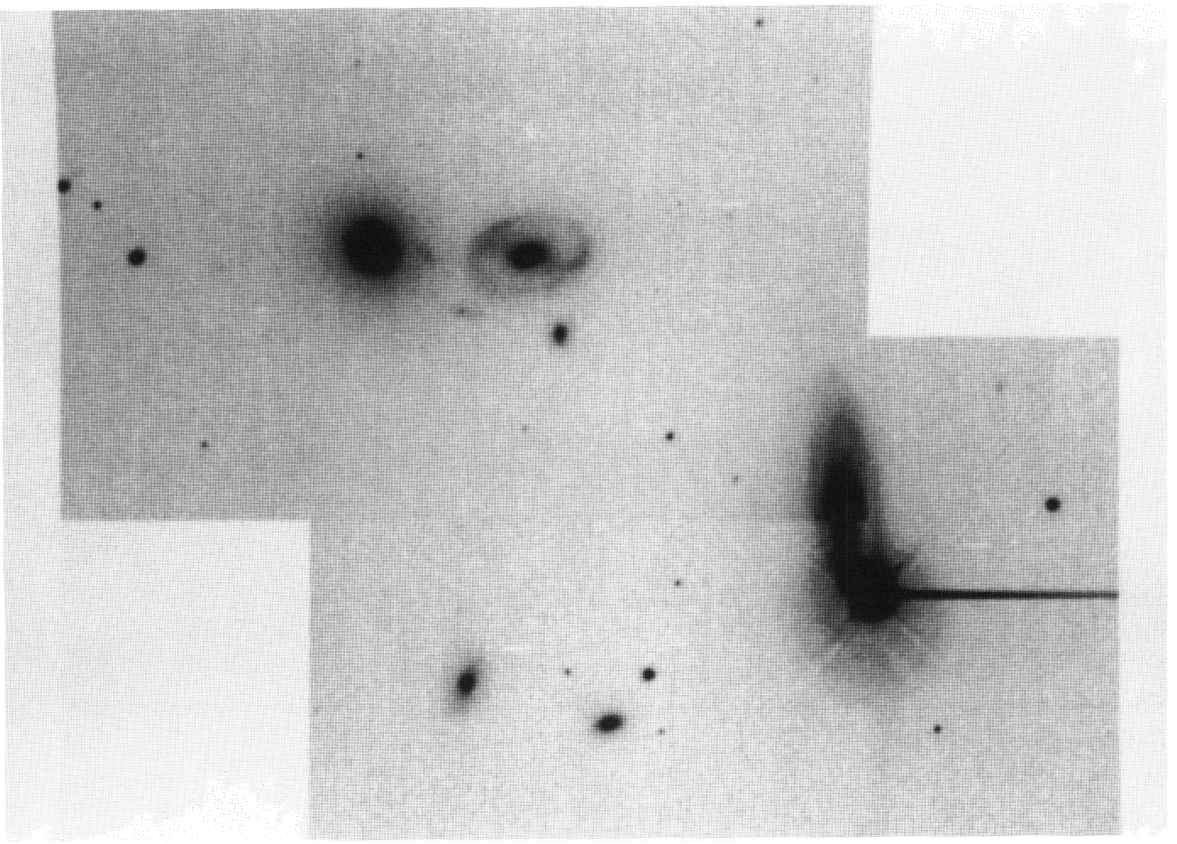
Group 99 is an accordant quintet containing a close pair of interacting galaxies (b and c). Galaxy c has a very pronounced bar and ring.

GROUP DATA

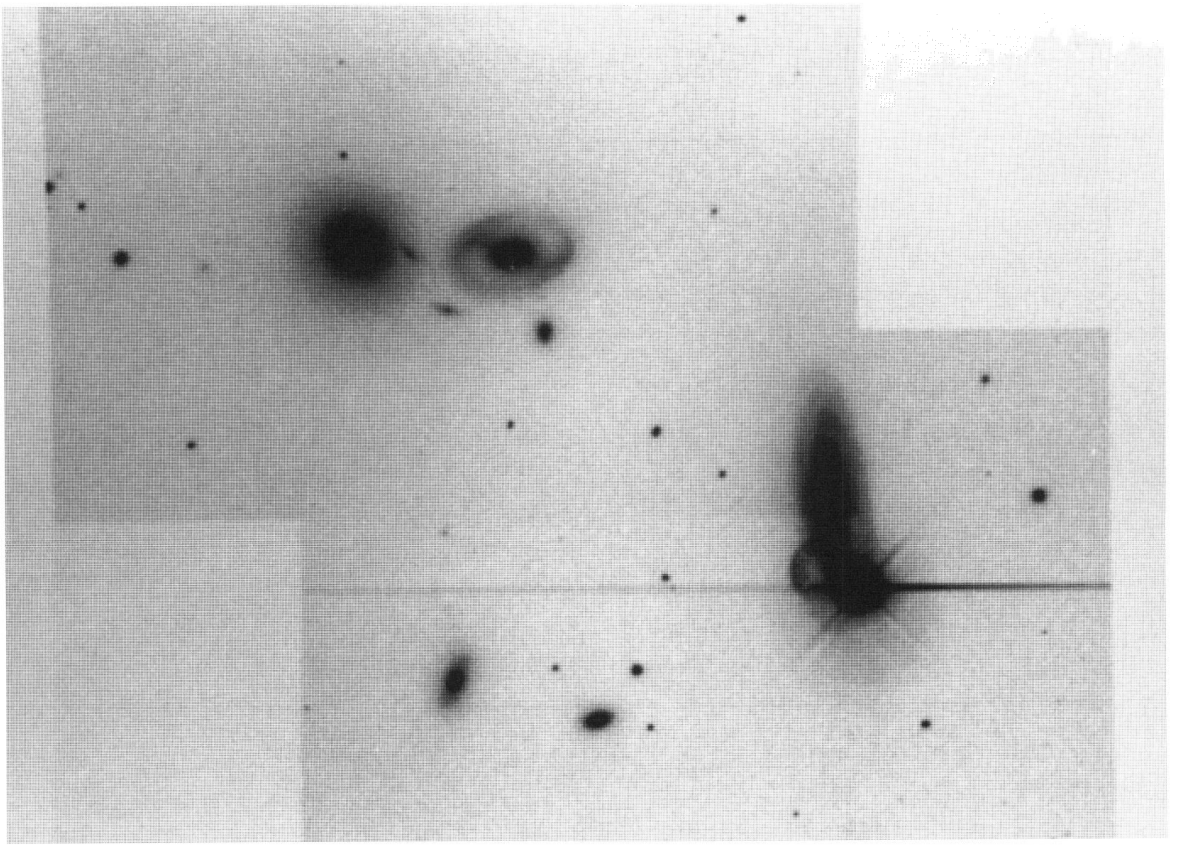
r.a. (1950)	(h m s)	23 58 09.85
dec. (1950)	(° ' ")	+28 06 26.9
galactic longitude	(°)	109.60
galactic latitude	(°)	-33.17
mean redshift		0.0290
total blue magnitude (B_{TC})		12.97
number of galaxies		5
number of accordant galaxies		5
median galaxy separation	(kpc)	42.7
radial velocity dispersion	(km/s)	263.0
crossing time	(Ht_c)	0.0123
mass-to-light ratio	($M_\odot/L_\odot$)	50.1

GALAXY DATA

Galaxy:		a	b	c	d	e
α	(m s)	58 04.6	58 13.5	58 10.6	58 11.7	58 08.9
δ	(' ")	06 23.9	07 24.7	07 23.0	05 35.9	05 27.2
v	(km/s)	8705	8846	8216	8643	9007
Δv	(km/s)	20	30	34	82	96
T		Sa	E2	SB0a	S0a	S0
a	(")	34.70	24.80	21.50	9.40	11.30
b	(")	15.20	22.10	13.90	6.10	8.90
B_{TC}		13.97	14.03	14.87	16.73	17.28
$B-R$		1.70	1.76	1.76	1.67	1.65
$\log F_{60\mu}$	(Jy)					
$\log F_{100\mu}$	(Jy)					
$\log F_{20cm}$	(mJy)					
name		U12897	U12899			

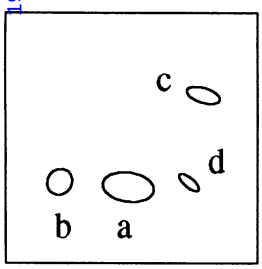


B



R

Group 100



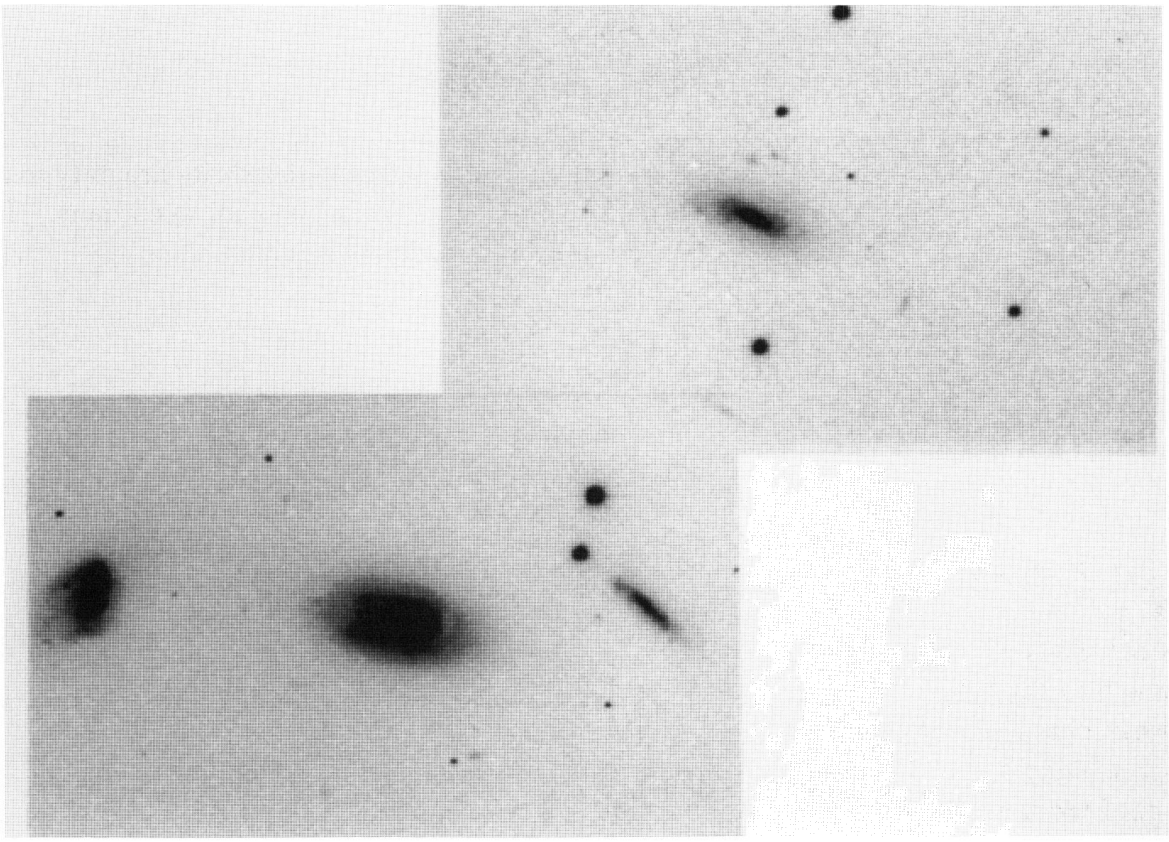
Group 100 is a quartet of spiral galaxies. Redshifts are only available for the brightest three galaxies and are all accordant. The brightest galaxy is a radio and infrared source.

GROUP DATA

r.a. (1950)	(h m s)	23 58 44.86
dec. (1950)	(° ' ")	+12 50 30.1
galactic longitude	(°)	104.54
galactic latitude	(°)	-47.95
mean redshift		0.0178
total blue magnitude (B_{TC})		13.10
number of galaxies		4
number of accordant galaxies		3
median galaxy separation	(kpc)	38.0
radial velocity dispersion	(km/s)	89.1
crossing time	(Ht_c)	0.0347
mass-to-light ratio	($M_\odot/L_\odot$)	31.6

GALAXY DATA

Galaxy:		a	b	c	d
α	(m s)	58 46.3	58 52.4	58 39.8	58 41.0
δ	(' ")	49 57.2	50 03.8	51 56.1	50 03.3
v	(km/s)	5300	5253	5461	
Δv	(km/s)	27	37	38	
T		Sb	Sm	SBc	Scd
a	(")	33.20	17.30	22.10	16.00
b	(")	19.00	15.70	9.60	6.10
B_{TC}		13.66	14.90	15.22	15.97
$B-R$		1.53	1.05	1.23	1.18
$\log F_{60\mu}$	(Jy)	2.07			
$\log F_{100\mu}$	(Jy)	4.17			
$\log F_{20cm}$	(mJy)	8.46	0.89		
name		N7803	M0934		



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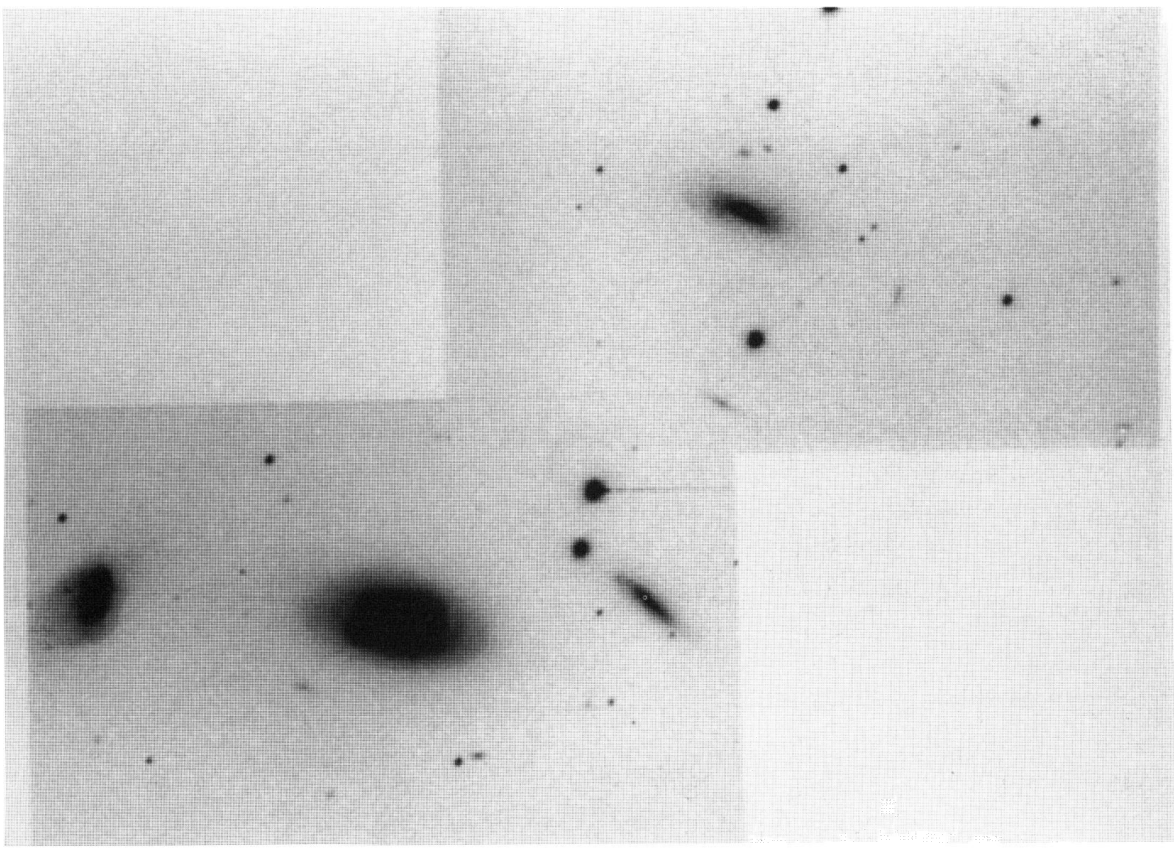

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My Universe
Selected Reviews

By Ya. B. Zeldovich

Edited by **Boris Ya. Zeldovich**, Chelyabinsk Polytechical Institute, Russia, and **M.V. Sazhin**, Sternberg Astronomical Institute, Moscow, Russia

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Editorial

With this issue of *Astrophysical Letters & Communications* we present several changes in the journal's Editorial Board. I would like to take this opportunity to thank Yasuo Tanaka, retiring Regional Editor for Japan, and the four outgoing members of the Editorial Board, all of whom have served for several years, for their help and dedication. I want also to welcome the new Regional Editor for Japan, Fumiyoshi Makino, and the six incoming board members; I look forward to working with them in the years to come.

Astrophysical Letters & Communications, in addition to publishing regular articles in all fields of astrophysics, occasionally has published long solicited papers containing atlases and/or catalogues which, in our opinion, will remain as landmarks in the field for some time to come. We also have published proceedings of topical conferences in special issues with the uncommon characteristic of having all the papers refereed. Now that the journal is regularly on library shelves, and, we hope, on your desks, we intend to make review articles, conference summaries and book reviews regular features of the journal. We are convinced that, by using the experience of the Editorial Board members who will continue to serve and the new vigor of the new members, the high editorial and scientific standards set in the past will be maintained. We trust that you will agree that *Astrophysical Letters & Communications* will provide an exciting opportunity for presenting your research and views to the scientific community.

Please feel free to contact me or one of the regional editors if you would like to submit an article for publication or to suggest ideas for future reviews or special issues.

Giorgio G. C. Palumbo
Editor in Chief