THE SPECTROSCOPIC BINARY CAPELLA.

By W. W. CAMPBELL.

AN examination of six spectrum plates of α Aurigae, obtained with the Mills spectrograph in 1896–7, leaves no doubt that this star is a spectroscopic binary. The spectrum is composite. The component whose spectrum is of the solar type furnished the following velocities with reference to the solar system:

1896 Aug. 31	+ 34 km
Sept. 16	+ 54
Oct. 3	+ 49
Oct. 5	+ 44
Nov. 12	+ 4
1897 Feb. 24	+ 3

On the first photograph the spectrum is of essentially normal solar type; on the others it is unmistakably different. There appears to be a second component whose spectrum contains the $H\gamma$ line and the rather prominent iron lines. On the plates of September 16, October 3, and October 5, these lines are shifted toward the violet with reference to the solar type spectrum; and in the spectra of November 12 and February 24 they are shifted toward the red.

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