NOTES FROM PACIFIC COAST OBSERVATORIES

The Orbit of "ξ² Centauri"

The spectroscopic binary character of ξ² *Centauri* (α 1900.0, 13ʰ 1ᵐ1, δ 1900.0, — 49° 22′, visual magnitude 4.40, spectral type B3) was announced by Moore in *Lick Observatory Bulletin,* No. 6, 56, 1910.

The radial velocities from four spectrograms as given in Volume XVI of *Publications of the Lick Observatory,* with those derived from 26 additional spectrograms secured by the writer, form the basis of the investigation of the orbit. The final elements quoted below were derived by the method of least-squares, the period being included as one of the unknown quantities. Between the first and the last observation the star covered 810 revolutions. The elements are:

$P =$	7.649652	$\pm$ 0.000004 days
$T =$	J.D. 2418077.493	$\pm$ 0.024
$e =$	0.353	$\pm$ 0.024
$\omega =$	308°.63	$\pm$ 2°.20
$K =$	38.8 km	$\pm$ 0.9 km
$\gamma =$	+14.3 km	

The probable error of an observation of weight unity, equal to 1.5 plates, is ±2 km. The sum of the squared residuals of the final elements is 16 per cent less than that derived from the preliminary elements.

Only the lines λλ 4267, 4340, 4388, 4471, 4481, were used in deriving the radial velocities. The line λ 4471 was given three times the weight of λ 4340, and other lines received twice the weight of λ 4340.

In Moore's *Third Catalogue of Spectroscopic Binary Stars,*[1] the remark "Two Spectra" after ξ² *Centauri* in Table I, and the elements given under this star in Table III, belong actually to ζ *Centauri* (R. A. 13ʰ 49ᵐ3). The writer is indebted to Miss

[1] *Lick Obs. Bull.,* No. 355, 1924.