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ORBIT OF THE SPECTROSCOPIC BINARY 40 AURIGÆ

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Forty Aurigæ ($\alpha = 5^{\text{h}} 59^{\text{m}} 6$, $\delta = +38^\circ 29'$, mag. 5.31, type A) was announced as a spectroscopic binary by Lee in the *Astrophysical Journal*, Vol. XXXIX, 1914. The following discussion of the orbit is based on measures of the three plates given there, and fifty-three taken here with a one-prism spectrograph attached to the 15-inch telescope.

TABLE I

X	X	X	X
4005.402	4292.118	4294.270	4181.402
4030.766	4215.714	4307.979	4501.503
4035.092	4233.521	4325.907	4508.455
4045.974	4236.601	4340.669	4520.430
4063.706	4250.698	4351.990	4522.909
4071.862	4260.579	4365.287	4534.140
4104.891	4271.643	4404.928	4549.747
4143.789	4282.585	4415.213	4558.960
4191.672	4290.449	4468.870	4572.143
4198.719	4377.585		

D

Table I gives the wave-lengths of the lines used in reducing the measures. They are the same as those found for the binary Groombridge 1149 and seem to suit the present spectrum very well. The journal of observations follows in Table II. The residuals given in this table under O-C were determined graphically from the final curve. The weights are those used in the least-square solution.

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