

mag., respectively. Since the parallax is not likely to be much less than $0''.01$, the companion would seem to be a white dwarf. While there is no question as to the reality of the motion of the brighter star the images of the fainter companion on the Harvard plates are so poor that some doubt still exists as to the reality of the companionship. The possibility of its being a companion, however, was noted in the blink microscope before anything else was known about the star. Moreover, if the companion were optical, it should have been almost due south of the primary at the time the old plate was taken (1934.71), whereas something was seen on this plate in about the correct north preceding position. Further observations will be required to settle the point.

5. L 879-14, $4^h 2^m 4$, $-8^\circ 53'$ (1950). has a motion of $1''.49$ in position angle 171° . Color plates taken with the 60-inch telescope indicated a color index of about $+0.4$ mag. (by the approximate differential method). Two further pairs of comparisons were then made with Selected Area 92 giving: $m_{pg} = 13.92$; $m_{pv} = 13.51$, C.I. = $+0.41$. With a parallax of the order of about $0''.03$ this star would appear to be at least an "intermediate" belonging to Population II.

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POSITIONS OF MINOR PLANETS (9) METIS AND (30) URANIA

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The following positions were determined from photographs taken with the 4-inch Ross camera at the Students' Observatory with a wire grating in front of the objective. The three star dependency method was used for reducing the plates.

1949 U.T.	Planet	α (1950.0)	δ (1950.0)
Oct. 28.37671	9 Metis	2 ^h 45 ^m 46 ^s .75	+10°33' 5"9
Nov. 1.3432	9 Metis	2 41 44.39	+10 26 0.8
Nov. 11.3363	9 Metis	2 31 25.71	+10 11 48.0
Nov. 14.2492	9 Metis	2 28 32.82	+10 9 10.0
Nov. 29.1945	9 Metis	2 16 20.95	+10 12 6.6
Dec. 1.2667	9 Metis	2 15 7.78	+10 15 2.6
Oct. 6.3572	30 Urania	1 27 12.24	+13 10 37.7
Oct. 12.2969	30 Urania	1 21 13.05	+12 46 4.4
Oct. 28.2331	30 Urania	1 6 53.29	+11 20 47.7

For Urania the reference stars were taken from the *Yale Zone Catalogue*. For Metis the reference stars were mostly from the *Boss General Catalogue*, occasionally supplemented by a star from the Yale Zones.

The observations, measures, and reductions were made under the direction of R. J. Trumpler.

MAGNETIC FIELD OF A LATE-TYPE STAR, HD 4174

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Attention has been directed to the peculiar combination spectrum of HD 4174 by Ralph E. Wilson, who discovered bright lines of [Ne III], of [O III], and of the Balmer series of *H*, superposed on the absorption spectrum of a normal M2 giant.¹ He found no evidence of variation.

Because of the peculiar excitation, the spectrum was tested for Zeeman effect by photographing it with the double circular analyzer. Definite evidence of a magnetic field was found on a plate of June 29, 1950, when the polar field, measured in the usual way, had an intensity of -2500 gauss (south-seeking polarity). A plate of October 22 shows a polar field of $+3550$ gauss. These measures relate to 14 absorption lines selected at random; probable errors are approximately ± 750 gauss. Some of the lines are quite strong, with low central intensity; therefore the field must

¹ *Pub. A.S.P.*, 62, 14, 1950.