

LIGHT TIME EFFECT IN AR AUR

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ABSTRACT

The eclipsing system AR Aur **Mas** discovered by Pedersen and Stensgaard (1931). Popper (1959) classified the eclipsing components as B8 V and B9.5 V. According to Wolff and Preston (1978) the primary component (B8) is a HgMn star. Spectroscopic elements were determined by Wyse (1936) from observations made in the years 1934 - 1935 and by Harper (1937) from observations 1935 -1936. The masses of the components according to Wyse are 2.48 and 2.29 M_{\odot} , according to Harper - 2.68 and 2.36 M_{\odot} . Rachkovskaya (1985) observed the star in the years 1967 -1968 and 1981 - 1982 and obtained the mass ratio $q \gg 1$. The orbital inclination according to Johansen (1970) is $i = 88.^{\circ}4$.