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SURPRISINGLY HIGH OPTICAL POLARIZATION
OF μ CEPHEI

During August and September 1980 at Belgrade Astronomical Observatory a high degree of linear polarization of μ Cephei in V spectral region was observed. The preliminary mean values of polarization parameters, observed on August 7 and 15 as well as on September 5 and 9, are: $P = 3.8\%$ and $\theta = 35^\circ$. Deviations of the individual measurements from the mean values are insignificant. As far as we know this is the highest long lasted value of the μ Cephei polarization percentage, although some highly scattered individual measurements reaching 4% (Grigoryan, 1959) have been published.

μ Cephei is a star having long series with a great number of photoelectric observations - photometric and polarimetric (e.g. Polyakova, 1975 and 1974). There were also several inconclusive attempts to explain the origin of the observed polarization. It is clear, however, that the additional observations of various kinds, especially during forthcoming decrease of polarization percentage we can expect, seem necessary. Therefore, besides Belgrade polarimetric observations that will be carried on, similar observations, as well as photometric ones, in various spectral regions, including infrared, are desirable. Spectral observations, especially radial velocities, would be useful, too. Even a series of speckle interferometric measurements can be of interest.

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