

standard" chemical composition must be small but that of stars in K2 III – K5 III range with "standard" chemical composition is predominant. However, in the most nearby open Hyades and Praesepe clusters the K0 III giant stars have "standard" abundance (except for some elements C, O, Na) whereas in the most well studied dynamical group the α Boo star (K2 IIIp) is certain to be metal-deficient. In the analysis and comparisons of results obtained by the various authors the abundances should be given relative to hydrogen in the same star rather than relative to abundance in the solar atmospheres. From our data the abundances in atmospheres of 57 giant stars belonging to the disk of Galaxy are obtained.

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PHOTOMETRIC STUDY OF A NEW X-RAY SOURCE – THE ECLIPSING POLAR RXJ 2107.9–0518

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ABSTRACT. The object RXJ 2107.9–0518 was discovered as a soft X-ray source at the space observatory ROSAT in 1990. Its X-ray spectrum is characteristic to the systems of the AM Her type thus the object was suspected to be a polar. The first photometric study of this object were obtained in 1992 independently at two observatories: in August–October by Schwöpe et al. at the 90-cm ESO telescope and in November–December by us at the 50-cm telescope of the Crimean Astrophysical Observatory.

Our photometry confirmed the preliminary classification of this source as a polar with an orbital period of 125 minutes. The eclipses were detected with a duration of nearly 10 minutes and with depth $\geq 3.5^m$. It was found that the eclipsed emission source is shifted in respect to the line of centers at 32° . The morphology of the light curves is consistent with two active magnetic poles the power of which changes with time similar to BY Cam.

Key words: Stars: Cataclysmic Variables; Polars.