The early B-type star Rho Oph A is an X-ray lighthouse.

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We present the results of a 140 ks XMM-Newton observation of the B2 star Ï• Ophiuchi A. The star exhibited strong X-ray variability: a cusp-shaped increase of rate, similar to the one we partially observed in 2013, and a bright flare. These events are separated in time by about 104 ks, which likely correspond to the rotational period of the star (1.2 days). Time resolved spectroscopy of the X-ray spectra shows that the first event is almost only due to an increase of the plasma emission measure, while the second increase of rate is mainly due is a major flare, with temperatures in excess of 60 MK (kTâˆ¼5 keV). From the analysis of its rise we infer a magnetic field of â‰¥300 G and a size of the flaring region of âˆ¼1.4âˆ'1.9x10^11 cm, which corresponds to âˆ¼25%âˆ'30% of the s radius. We speculate that either an intrinsic magnetism that produces a hot spot on its surface, or an unknown low mass companion are the source of such X-rays and variability. A hot spot of magnetic origin should be a stable structure over a time span of â‰¥2.5 years, and suggests an overall large scale dipolar magnetic field that produce an extended feature on the stellar surface. In the second scenario, a low mass unknown companion is the emitter of X-rays and it should orbit extremely close to the surface of the primary in a locked spin-orbit configuration, almost on the verge of collapsing onto the primary. As such, the X-ray activity of the secondary star would be enhanced by both its young age and the tight orbit like in RS Cvn systems and Rho Oph would constitute an extreme system worth of further investigation.

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