

# An abundance analysis of AK Sco, a Herbig Ae SB2 system with a magnetic component

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**Abstract.** AK Sco is an SB2 system formed by two nearly identical Herbig Ae stars, with  $T_{\text{eff}} = 6500$  K and  $\log g = 4.5$ , surrounded by a circumbinary disk. This actively accreting system is of special interest among the pre-main-sequence binaries because of its prominent ultraviolet excess and the high eccentricity of its orbit. Moreover, recent spectropolarimetric observations using HARPSpol indicate the presence of a weak magnetic field in the secondary component (Järvinen *et al.* 2018). An abundance analysis of both components has shown that all elements have a solar abundance in the two stars, except for Li and Ba. These elements are enhanced by 2.2 and 0.5 dex, respectively, in the A component and by 2.4 and 0.5 dex, respectively, in the B component.

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## Reference

Järvinen, S.P., *et al.*, 2018, *ApJ*, 858, L18