

## Spectroscopic study of the polar BS Tri

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### Abstract

© 2015, Pleiades Publishing, Inc. We have analyzed the spectra of the cataclysmic variable BS Tri taken in September 2011 and August 2012 with the 6-m BTA SAO RAS telescope. The object's spectra exhibit a flat continuum with superimposed strong hydrogen Balmer, neutral and ionized helium emission lines. Our analysis of the line profiles has shown that they consist of several components that are formed in the accretion structure and on the irradiated red dwarf surface. The measured radial velocities of one of the components of the line forming in a spot on the red dwarf surface have allowed the parameters of the system to be estimated:  $M_1 = 0.75 \pm 0.02 M_{\odot}$ ,  $M_2 = 0.16 \pm 0.01 M_{\odot}$ ,  $q = 0.21 \pm 0.02$ , and  $RL_2 = 0.18 \pm 0.02 R_{\odot}$ . The Doppler maps constructed from the emission lines show no disk accretion, defining the system as a polar.

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### Keywords

AM Her CVs, BS Tri