

Spectroscopic study of the RX Hya – an Algol-type system with pulsating, mass-accreting component

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RX Hydrae is a short-period (2d.2815) Algol-type eclipsing binary system with a pulsating primary component. This system was discovered by H.S. Leavitt (Pickering, 1907), the first spectroscopic elements were determined by Struve (1946) and the absolute parameters of this system was derived by Vyas & Abhyankar (1989). Short-periodic pulsations in a light curve of a primary component were detected by Kim et.al (2002). We carried out the spectroscopic observations of this binary system in order to improve the binary system parameters and for spectroscopic study of pulsations in the primary component. Spectroscopic observations were acquired during 13 nights between 2014-2015 with the 2.4-meters telescope of Thai National Observatory (TNO) and fiber-fed medium resolution echelle-spectrograph. We obtained new accurate orbital radial velocities of two components of the binary system and search for pulsational variability of the primary component. Results of these investigations and new orbital parameters are presented.

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