

## Near infrared excess energy in binary system V367 Cygni

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\* V367 Cygni (HD 198287-8), V= 7.04<sup>m</sup>, B= 7.66<sup>m</sup>, P= 18.<sup>d</sup>6, Sp= A7Iapevar, RA=20<sup>h</sup>47<sup>m</sup>59<sup>s</sup>.6, DEC=+39° 17' 15".7 (J 2000) is an eclipsing binary system in Serpentids group. Only the spectrum of the primary component is observable and it exhibits a shell-like spectrum, an indication of a gaseous stream of material surrounding the system. The underlying stellar spectrum is dominated by sharp shell lines mostly of singly-ionized shell lines.  $\lambda 4481$  Mg II is the only strong and clearly visible stellar line in the optical spectrum. Light curve modeling can be found in several papers on V367 Cygni, and system parameters have been derived considering a semidetached configuration with an optically thick disk as well as a contact configuration.

In this study we obtained the spectral energy distribution of the system using previous observations and found a near infrared excess. We attributed free-free emission for this excess and found that the electron density of the mass accretion disk  $\sim 9 \times 10^{59} \text{ cm}^{-3}$ . Near-infrared spectra in JHK bands obtained from the Mt-Abu observatory in India during December 2003 were analyzed and we found that the emission line of Fe II is present in the H band at primary minimum.