## LBV- star V532 in its lowest minimum.

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Open black circles - photographic observations from SAI, blue circles - photographic observations by Romano, color and filled symbols - CCD observations from SAI and SAO telescopes. The arrows mark the timings of our spectral observations.



We present results of spectral and photometrical monitoring of LBV star V532 in M33 (Romano's star) during 2010 - 2015 years. In this period the star shows a state of minimum luminosity and the hottest spectra for all history of its studing. Over the 55 years of observations the star showed an absolute maximum in 1992–1994 (high/cold state) and a minimum in 2007 - 2008 and an absolute minimum (low/hot state) in 2013 - 2015.



The star demonstrates the B - V color dependence on the V-band brightness variations that confirms the LBV - type of variability.



We have inspected the spectra of V532 since 1992. Significant variations are seen in HeI lines intensities, HeII 4686 and Bowen blend CIII/NIII 4625—4650. When V532 goes through a transition from its high to low state, the spectral variations in the star are quite obvious, the photosphere temperature increase is naturally followed by the appearance and growth of high-excitation lines.



Using our spectral, photometric and archive data we have made spectral energy distribution (SED) for 5 states of the star in 1992 — 2015. We develop a new approach to the estimation of LBV parameters based on the inherent property of LBVs to change their spectral type at constant bolometric luminosity. We compare the spectral energy distributions of V532 obtained in different states, and we estimate the temperatures, reddening, radii and luminosities of the star using this method. For this time the star varied in brightness for about 2 magnitudes and had temperature changes from 16000K up to 45000K.

We used different criteria for estimation of spectral class of the star and find that it changed from Of(pe) in 1992 to WN8 in 2015.

The question of further evolution of this star is still open.