



Contribution ID: 528

Type: **Talk in the parallel session**

## Fall and raise of Betelegeuse

*Thursday, 8 July 2021 16:30 (5 minutes)*

The opportunity of this session is to focus on

- 1) observations and their criticities in the AAVSO 130 years database on Betelgeuse
  - a) V-Band
  - b) R obs in daylight
  - c) Before AAVSO
  - d) visual near the horizon
- 2) time series analyses of Betelgeuse's light curve
  - a) mathematical properties
  - b) other Supergiants: VY Canis Majoris, Eta Carinae
- 3) spectral data on Betelgeuse during the deep minimum and in other phases
  - a) SOFIA, airborne NASA telescope
  - b) Caucasian Observatory
  - c) Asiago Telescopes
- 4) high resolution imaging of Betelgeuse
  - a) HST
  - b) ALMA
- 5) models of Betelgeuse
  - a) CfA
  - b) star unusual rotation
  - c) no further dust ejection
  - d) overview

The goal of this session would be a general vision on that star, and on the tools to study it. In other words not only a case study, but the concourse of all astrophysics, astronomy and history of human culture, and the possibility to an interdisciplinary audience to understand and to be stimulated by this star, easily visible from both hemispheres.

For these reasons the Scientific Committee of the Grossmann meeting wanted this special session HR1.

On January 17 2020 we had a meeting on the deep minimum,

now we hope to open wider the attendance, including the major protagonists of this phenomenon which was visible to everyone at naked eye. Something similar occurs only to lunar eclipses for less than three hours, Betelgeuse did it for more than 3 months.

### **References**

Betelgeuse dimming: the state of the star  
International workshop

**Primary author:** SIGISMONDI, Costantino (ICRA Sapienza and ICRANET Pescara)

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**Session Classification:** The "Fall and Rise" of Betelgeuse

**Track Classification:** History of Relativity: The "Fall and Rise" of Betelgeuse