

## **Seminarium Astrofizyczne**

wtorek 15.10.2019 godz. 12:30  
ul. Pasteura 7; sala 404

### **Cezary Gałan**

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### **Chemical compositions as indicators of evolution in binary systems. Results from studies of symbiotic giants**

Symbiotic stars are a group of evolved, long-period binary systems composed of a cool giant donor and a hot, compact object - usually a white dwarf. The complex nature of interactions between the components of these systems makes them ideal for studying evolution in binary systems, especially at the final stages. Chemical composition, next to initial mass is among the major parameters determining stellar evolution. Until recently, knowledge of abundances in symbiotic red giants was limited to only a few cases. Our analyzes of the last several years, using high and low-resolution spectra in the optical and especially infrared domain not influenced significantly by the nebular continuum, have increased the statistics to well over a hundred objects. Our spectroscopic data and methods used will be presented. I will discuss what we can learn about the evolution of components of the long-period binary systems, the history of the mass transfer and evolution in Galactic stellar populations on the example of studies of chemical composition in symbiotic giants.

Serdecznie zapraszam,  
Agnieszka Majczyna