

We are pleased to announce that the V edition of the RR Lyrae and Cepheid meetings 2024 Frontiers of Classical Pulsators Theory and Observations in Marrakesh (Morocco) from 23 to 30 November 2024. The conference, intended to be in presence and online meeting.

The registration for the meeting opened on March 15 2024. Detailed information can be found at the web page: https://cep2024.nocmorocco.org/

The RR Lyrae and Cepheid meeting 2024: Frontiers of Classical Pulsators – Theory and Observations November 23–30, 2024 Marrakech Morocco

This 5th edition of the RR Lyrae and Cepheid Conference is organized in Marrakesh (Morocco) *from 23 to 30 November 2024*. Previous editions were held in Visegrad (Hungary) in 2015, Niepolomice (Poland) in 2017, Cloudcroft (USA) in 2019 and La Palma (Spain) in 2022.

Cepheids and RR Lyrae have played a historical role in the development of astronomy in general. At the beginning of the 20th century, the famous period-luminosity relationship played a fundamental role in the discovery of the nature of galaxies and the expansion of the universe. The study of the properties of Cepheids and RR Lyrae makes it possible to understand the structure and evolution of these classes of variable stars, allowing for decisive advances on the theory of stellar evolution.

Space missions like CoRoT, Kepler, and TESS, and large photometric surveys such as OGLE and MACHO have delivered a considerable amount of photometric data, which require international collaboration from different horizons. These new data, freely available to the global astronomical community, offer a challenge and an opportunity for astronomers worldwide to develop digital acquisition and processing solutions.

The development of astronomy in Africa represents a great asset for global astronomy. Indeed, astronomy in Africa has grown considerably, also thanks to the development of sophisticated instruments that equip telescopes of small and large sizes across the globe. The African Astronomical Society (AfAS) was created to define a framework for the development of astronomical research and to support researchers in their mission. The relatively small telescopes and the instruments that equip the observatories recently installed in Africa, and at the Oukaimeden observatory in Morocco in particular, can be very effective in the study of variables that require long periods of observation. Indeed, the Blazhko effect and other cyclic variations in variables continue to challenge our knowledge of the atmospheric dynamics of variable stars. Long-term photometric and spectroscopic observations are essential to understand the mechanisms that take place inside these stars and, therefore, interpret them correctly.

At this meeting, we will focus on the development of astronomy in Africa and allow researchers from the continent to both contribute and increase their know-how and experiences

gained in the study of variable stars RR Lyrae and Cepheids. Theorists and experimenters gathered will present their recent work to weave ways of cooperation and allow Africa to position itself in this research field.

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LOC

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