

**K. Kolenberg and M. Breger**

*Institute for Astronomy, Vienna University, Tuerkenschanzstrasse 17, A-1180 Vienna, Austria*

Almost a century after its discovery, the phenomenon of amplitude and/or phase modulation, observed in a large percentage of the RR Lyrae stars, still lacks widely acceptable theoretical understanding. Recent attempts to theoretically explain the effect focus on two alternatives: the magnetic models and the resonances models, both involving the presence of nonradial pulsation components.

We present the '*Blazhko Project*', a larger international collaboration focused on understanding the Blazhko effect. The aim of the '*Blazhko Project*' is to combine spectroscopic and photometric data from a sample of well-selected Blazhko and non-Blazhko stars, to reveal decisive information on the physical mechanism responsible for the modulation.

Solving the century-old Blazhko puzzle will not only enlarge our understanding of the structure of RR Lyrae stars, better pinpointing their exact evolutionary status, but it will also clarify similar phenomena occurring in other types of pulsating stars.

---