Elbereth conference 2024



ID de Contribution: 35 Type: Oral presentation

The calibration of the p-factor of pulsating stars: an unanswered question?

mercredi 28 février 2024 13:00 (15 minutes)

The projection factor, or p-factor, is a way to link the observed radial velocity of the atmosphere of the star to the velocity of the photosphere. It was introduced in the context of the Baade-Wesslink technique, to determine distances of pulsating stars. However, after almost a century of using the method and of efforts put in the calibration of this factor, results still seem to be inconciliable. The dispersion between individual values remains of the 10% order, despite higher precision in distances measurements thanks to Gaia parallaxes for instance. Understanding the origin of this scatter is a key to improve our knowledge of the atmosphere of pulsating stars.

Astrophysics Field

Solar & Stellar Physics

Day constraints

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Classification de Session: Session 2