



Das Institut für Physik

Institutsbereich Geophysik, Astrophysik und Meteorologie

lädt zu folgendem Vortrag

im Rahmen des **Astrophysikalischen Kolloquiums** ein:

"Stellar Phylogenies – Benchmark stars and benchmark tests for Galactic Archaeology"

Dr. Paula Jofre

Astronomy Nucleus at the University Diego Portales (UDP)

Galactic Archaeology is commonly referred as to the studies of Galactic history using chemical abundances of long-lived stars as fossil records. Today, thanks to Gaia and the large spectroscopic surveys available to the community, this field of study is going through a revolution because we have information of about 20 different chemical elements, ages and kinematics for thousands of stars. However, putting this huge multidimensional information together is everything but straightforward.

In this talk I will first discuss the role of benchmark stars in setting a scale for stellar parameters and abundances in the context of modern spectroscopic surveys. Second, I will introduce benchmark tests that take advantage of this multidimensional information by literally taking long-lived stars as fossil records and putting these into phylogenetic trees, like a biologist.

Time: **Wednesday, November 10, 2021, 17:00 CET (st!)**

Meeting: <https://unigraz.webex.com/meet/paul.beck>

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