

Benchmark stars, benchmark spectrographs!

Wednesday, October 20, 2021 10:15 AM (15 minutes)

Gaia benchmark stars are selected to be calibration stars for different spectroscopic surveys. Very high-quality and homogeneous spectroscopic data for these stars are therefore required. We used ultrahigh- and high-resolution spectra obtained with the ESPRESSO, PEPSI, and HARPS spectrographs to measure spectral line characteristics and determined stellar parameters and abundances for these benchmark stars. We show that these outstanding spectrographs can deliver spectroscopic results that are sufficiently consistent for most of the science cases in stellar spectroscopy. However, we demonstrate that there are small but important differences in the performance of these three spectrographs that can be crucial for specific science cases. I propose making an oral presentation about our recent findings, which are published in A&A.

Type

contributed talk

Primary author: ADIBEKYAN, Vardan (Instituto de Astrofísica e Ciências do Espaço (IA))

Presenter: ADIBEKYAN, Vardan (Instituto de Astrofísica e Ciências do Espaço (IA))

Session Classification: Day 3