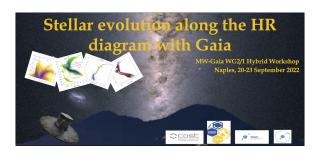
## Stellar evolution along the HR diagram with Gaia



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## The white dwarf population within 100pc as seen by Gaia-DR3 and the VO

Tuesday, 20 September 2022 15:50 (20 minutes)

The recent Gaia data release 3 has provided BP/RP spectra for most of the white dwarfs (WD) located closer than 100 pc from the Sun. This volume-limited sample of WDs within 100pc is the most complete sample of WDs defined so far (Jiménez-Esteban et al. 2018). We have used the Gaia-DR3 spectra, the Virtual Observatory (VO), and a new collection of emission model spectra, to classify the WDs into H-rich (DA) or He-rich (DB) atmosphere. Our method has demonstrated to be an excellent classifier, reaching both an accuracy and a precision higher than 90%. This has allowed to study the population of DA and DB WDs within 100pc as never before. In this talk we will explain the methodology used for classification, and we will present the result of the comparative study of DA and DB WD populations in the vicinity of the Sun.

Presenter: JIMÉNEZ-ESTEBAN, F.

Session Classification: Overview on Gaia data/products and their use