

Contribution ID: 64

Type: Poster

Stellar ages and how the NOT can help us

Tuesday, 7 June 2022 13:00 (2 minutes)

Unravelling the age is one of the most challenging tasks since most are subject to significant uncertainties, and their determinations face multiple observational and theoretical challenges. Ages are generally better determined in stellar associations. They usually provide a significant sample of objects when testing the hypothesis that they were born simultaneously from the same molecular cloud and identical composition. Several features and characteristics are considered when deriving ages in stellar associations. However, each of them is valid within a specific age interval. In particular, we focus on those techniques related to lithium evolution, valid for values between 20 to a few hundred Ma. To address this task, we need spectrographs with enough resolving power to determine the presence or absence of lithium in FGK dwarfs, low-mass stars and brown dwarfs.

Here we present our pilot study of the observing capabilities of the NOT with ALFOSC and FIES to determine ages in several stellar associations systematically.

Primary author: GALINDO-GUIL, Francisco José (CEFCA)

Presenter: GALINDO-GUIL, Francisco José (CEFCA)