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# The OCCASO survey: The NOT contribution to the understanding of Open clusters

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Open clusters are ideal laboratories to investigate a variety of astrophysical topics, from stellar physics to galaxy disk evolution. The Gaia mission and the complementary, ground-based massive spectroscopic surveys have led to a revolution in our knowledge of the Milky Way and its companion dwarfs galaxies including, of course, open clusters. However, they need complementary observations with high-resolution and large wavelength coverage spectrographs like FIES, allowing the determination of radial velocities and chemical abundances with higher accuracy and precision, and to investigate other chemical species. For this purpose, we are developing the Open Clusters Chemical Abundances from Spanish Observatories (OCCASO) project with the initial goal of investigating the chemical distribution of the Galaxy disk. Almost 500 stars belonging to about 60 clusters have been already observed. Derived radial velocities have a precision of about 15 km/s and chemical abundances a typical uncertainty of 0.03 dex. The OCCASO results are being used as calibrators for large surveys such as Gaia or APOGEE. In this talk, I will present the main results of OCCASO in the framework of the open clusters research, focusing on the contribution of FIES.

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