

Probing the origin of globular clusters and their multiple stellar populations: the key role of HRMOS

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Despite the tremendous amount of spectroscopic data available for Galactic globular cluster stars, several fundamental questions regarding their complex formation and evolution remain yet unanswered. In the general framework of multiple population (generation?) scenarios, an extensive comprehension of the stellar source of pollutions (and its relationship with global cluster parameters) is still not in hand. Next-coming surveys (already well defined) such as WEAVE, 4MOST, SDSS-V, or MOONS will probably not be providing fundamental clues in this respect, because of their limited resolution, spectral coverage, or a combination of both.

In this talk, I will focus on the critical role that will be played by HRMOS, in particular for the combination of light (including lithium) and heavy element abundances (up to lead), which are almost unexplored so far.

Type

invited talk

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