

The Gaia NIR mission and the engagement of the Spanish Community



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A GaianIR-aided view of the properties of Local Group dwarf galaxies

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As the smallest galaxies and the most dark matter dominated ones that we can observe, Local Group dwarf galaxies are widely considered as precious systems to shed light on the processes that drive galaxy formation and evolution at small halo masses.

Nonetheless, the majority of them are found in the surrounding of a much larger system, i.e. the Milky Way or M31; this makes the knowledge of the orbits around the host a crucial piece of information for investigating the role of environment in shaping the dwarf galaxies' observed properties. In addition, this type of information can also be used to improve our understanding of the host itself, e.g. its dark matter halo mass.

In this talk I will present the results of recent works based on Gaia data and discuss how the existence of Gaia-NIR could improve on those determinations.

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