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# SEMINARI

Departament d'Astronomia i Astrofísica  
Universitat de València



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## The Local Group as a Dark Matter Laboratory

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*Seminari del departament d'Astronomia i Astrofísica*

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*15:30*

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### Resum

*The Local Group (the Milky Way, Andromeda and their satellite galaxies) will ever be the galactic system with the largest and most thorough observational data set in the Universe. The potential information that can be inferred on galaxy formation processes and on the nature of Dark Matter is indeed extraordinary and will strongly increase in the next few years thanks to the advent of large ground-based surveys of the Local Group (e.g. Pan-STARRS, LSST), as well as of spatial missions like GAIA and JWST. In this talk I will provide a state-of-the-art review of the available constraints on the amount and distribution of dark matter in many of the the Local Group members, as well as of the many implications that these results have on the present cosmological paradigm of galaxy formation and evolution (Cold Dark Matter, CDM).*

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