

Studying the gas content of low surface brightness galaxies

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Abstract:

The Virgo cluster has been extensively studied at many wavelengths. Among the most recent data set, a noticeable one is the HI-blind survey with MeerKAT (de Gasperin et al. 2025). While lots of science cases can be pursued with such data, I will focus in this presentation on a case study of the detection of HI in diffuse galaxies that may be undergoing ram-pressure according to the study of multi-wavelength profiles (u,g,r,i,z,FUV,NUV,H-alpha) by Junais et al (2021). The gas content brings a new constrain for such studies. Beyond this case study, a systematic cross-correlation of the sources detected in this blind survey with catalogs of diffuse galaxies is planned. Finally, we will present some perspective on the results that may be expected in the future in this field with SKA.