

A search for neighbours around isolated galaxies using the SDSS

**M. Argudo¹, S. Verley², G. Bergond³, J. Sulentic¹, D. Espada¹,
J. D. Santander-Vela⁴, J. E. Ruiz¹, J. Sabater¹, L. Verdes-Montenegro¹, and
V. Martínez-Badenes¹**

¹ Instituto de Astrofísica de Andalucía

² Universidad de Granada

³ Calar Alto Astronomical Observatory

⁴ European Southern Observatory

Abstract

The AMIGA project (Analysis of the interstellar Medium of Isolated GALaxies) aims to build a well defined and statistically significant sample of isolated galaxies that can serve as a reference for quantifying the role of the environment on the formation and evolution of galaxies. The completed statistical analysis of the multiwavelength AMIGA sample allows us to initiate an evaluation of nurture (environment) driven effects. In this framework, we present preliminary results of a search for previously undetected neighbours around a subsample of AMIGA galaxies included in the SDSS DR7. This will allow us to refine our knowledge about the environments of AMIGA galaxies. SDSS CCD imagery and spectroscopy allow a stronger test of the degree of isolation in our sample galaxies.