



Photometric relations and morphological analysis of Fornax galaxies through S-PLUS

A.V. Smith Castelli^{1,2}, A.R. Lopes³, P. Dimauro³, N.M. Cardoso⁴, A. Cortesi⁵, C.R. de Bom⁶, C. Mendes de Oliveira⁷ & F. Almeida-Fernandes⁷

¹ *Instituto de Astrofísica de La Plata, CONICET-UNLP, Argentina*

² *Facultad de Ciencias Astronómicas y Geofísicas, UNLP, Argentina*

³ *Observatorio Nacional, Brasil*

⁴ *Escola Politécnica, USP, Brasil*

⁵ *Observatorio do Valongo, UFRJ, Brasil*

⁶ *Centro Brasileiro de Pesquisas Físicas, Brasil*

⁷ *Instituto de Astronomia, Geofísica e Ciências Atmosféricas, USP, Brasil*

Abstract / Although highly studied, the Fornax cluster has never been observed simultaneously in 12 photometric bands before. In the framework of the Southern Photometric Local Universe Survey (S-PLUS), 23 fields covering the Fornax cluster were imaged in the five SDSS broad-band filters as well as in seven additional narrow-band filters tracing specific spectral features. In this poster we present preliminary results on the analysis of photometric relations and morphological parameters of the Fornax galaxy population obtained from S-PLUS. In addition, emission line fluxes were calculated from the photometry performed on [OII] and H α images. We expect that these novel data provide new information about the galaxy content of Fornax, as well as on the evolutionary path of the whole cluster.

Keywords / surveys — methods: observational — galaxies: clusters: individual (Fornax) — galaxies: general

Contact / asmith@fcaglp.edu.ar