

New ESO-Large program on TNOs: first visible spectroscopic results. A. Alvarez-Candal¹, S. Fornasier^{1,2}, M.A. Barucci¹, C. de Bergh¹, F. Merlin¹, ¹LESIA/Observatoire de Paris, 5 Place Jules Janssen, 92195, Meudon Cedex, France, alvaro.alvarez@obspm.fr, ²Université de Paris 7 *Denis Diderot*.

Introduction: In this presentation we discuss part of the results of the visible spectroscopy of TNOs obtained with the instrument FORS1 at the UT2 of the ESO-VLT telescope in the framework of a new large program. We present spectra for 21 objects, 7 of them without previously reported spectra.

Methods: We computed the spectral slope for each object and searched for the possible existence of weak absorption features, as well as possible rotational inhomogeneities.

Results: Most of the observations are in a good agreement with previous ones, with some exceptions such as 60558 Echeclus, whose spectral slope is considerably smaller than in previous measurements [1], or 47932 (2000 GN₁₇₁) which does not show evidence of a proposed feature at 0.7 μm [1], [2]. A few objects show evidence of weak features in the visible. The most prominent case is that of 2003 AZ₈₄, that shows a broad band (width $\sim 0.3 \mu\text{m}$) at about 0.65 μm , previously detected [3].

References: [1] Lazzarin, M., Barucci, M. A., Boehnhardt, H., et al. (2003), *AJ*, 125, 1554. [2] de Bergh, C., Boehnhardt, H., Barucci, M.A., et al. (2004), *A&A*, 416, 791. [3] Fornasier, S., Doressoundiram, A., Tozzi, G.P., et al. (2004), *A&A*, 421, 353.