Morphological analysis of OTELO survey galaxies

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Results of the analysis of the first 3 magnitude bins using galSVM (mag$_{AB}$ <= 23):

- 345 objects selected from a total of 567 in the 3 bins;
- ~9% (31 objects) classified as early type (red points, PROBAV > 0.7);
- ~91% (314 objects) classified as late type (blue points, PROBAV < 0.35);

Classification based on: Gini coefficient, M20, Assymetry, Concentration, Smoothness.

GalFit is used to fit a single Sersic profile. In the future we plan to add a sky component as well as fitting neighboring objects. SExtractor$^3$ is used to provide input parameters for GalFit as a first guess.

The lacking triangle. This gap in HST/ACS images will be filled with CHFT and OSIRIS images. The analysis is going to be the same as for HST/ACS image (SExtractor, GalFit, GalSVM).

Explorations of a piece of EGS: 11k detections on the deep OSIRIS TF image. This HST I-band image (0.03"/px) is used as a first approx. to morphological analysis of ~4000 common objects. The brightest magnitude bins (up to HST mag <= 23) are already in the last phase of the analysis. GalSVM and GalFIT are used as the main tools for morphology fitting.

REFERENCE: