Contribution ID: **45** Type: **not specified**

A deep look at NGC1533 in the Dorado group of galaxies with VST

Friday 8 June 2018 09:45 (20 minutes)

We present a deep (μg ≈ 30 mag arcsec−2) surface photometry of NGC 1533, a barred early-type galaxy with an outer ring, situated in the east side of the Dorado group. The data were obtained with OmegaCAM@VST during the VEGAS surveys.
Our surface photometry reveals the presence of an extended underlying disk in NGC 1533. Relevant asymmetries, arm-like structures and tails are detected in the galaxy both via un-sharp masking and by subtraction of galaxy model.
The g−r color diagram and the color map suggest the presence of star formation regions at the inner edge of the ring, especially in the north side of the galaxy. These regions with UV features were already found with Swift-UVOT observations.
Signatures of interaction between the NGC 1533, IC 2038 and IC 2039 are detected by our optical images. These signatures are in agreement with the HI map, that connects these three galaxies. Moreover these features seem to be the optical counterparts of the high-density regions of intragroup HI rings and arcs.

Presenter: CATTAPAN, A.