Unsupervised study of star populations in NGC 1313 and NGC 2403

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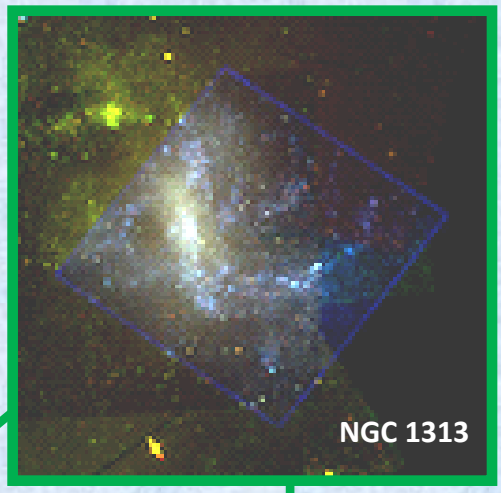
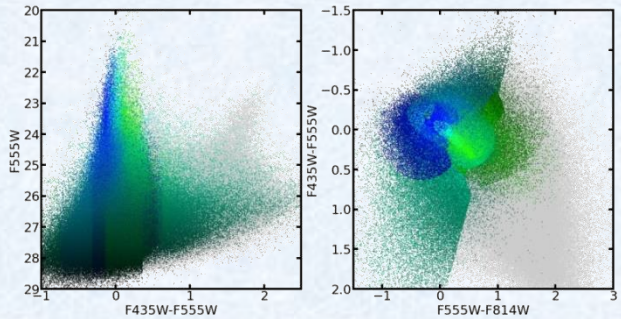
- Star populations in nearby galaxies were studied using multi-band photometric data
- Unsupervised learning techniques were applied to recognize both the stellar populations and the groups of stars in the youngest population of each galaxy.
- We identified the youngest populations with a hierarchical structure and the more evolved one with a homogeneous distribution, except for very large scale fluctuations.

HST images (ACS-WFC3)
- F275W
- F336W
- F435W
- F555W
- F814W

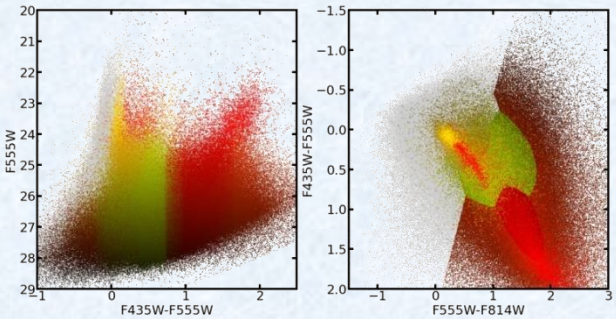


Photometry + GMM + K-Means

Blue population



Red population



Clustering