

# Star Clusters - Syllabus

- Definition and Characteristics of Star Clusters
  1. Open Clusters
  2. Globular Clusters
  3. Stellar Associations
  4. Moving Groups
  5. Massive Star Clusters
- Formation and Evolution
- Observational and “theoretical” techniques:
  1. Membership determination
  2. Isochrone fitting
  3. Pitfalls of reduction techniques

- (Different) Main Sequence(s)
- Star Clusters in the Gaia era
- Extragalactic Star Clusters
- N-body simulations
- Databases and surveys (WEBDA, Gaia, GAIA-ESO survey, ...)
- All slides as .pdf files on Server for download

# Star Clusters - Exercises

- Isochrone fitting - WEBDA
- Membership probability estimation – CLUSTERIX and UPMASK
- Automated Stellar Cluster Analysis (ASteCA)
- Writing a paper (optional) – CP stars as members of open clusters