

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
- Exercises online – starting at the 18.03.

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