

February 21, 2019
MSE 2103 topics

- The spectrum of light in real life – presentation
- Recall two types of star clusters:
 - open clusters: young, small-ish, in the disk of the galaxy
 - globular clusters: old, large-ish, in the halo of the galaxy
- First observations of open clusters
- The catalogs of Messier (110), Hershel (5000), Dreyer (13,000)
- Open clusters and the convergent point technique
- Basic assumptions of the main sequence fitting:
 - stars in clusters held together by gravity;
 - stars in clusters are coeval;
 - stars in clusters have different masses.
- Consequence: universality of the H-R diagram
- H-R diagrams of clusters at an unknown distance?
- Calibrating such H-R diagrams by way of universality
- Added bonus: age of the cluster from the turn-off point!
- But where does this universality stem from?