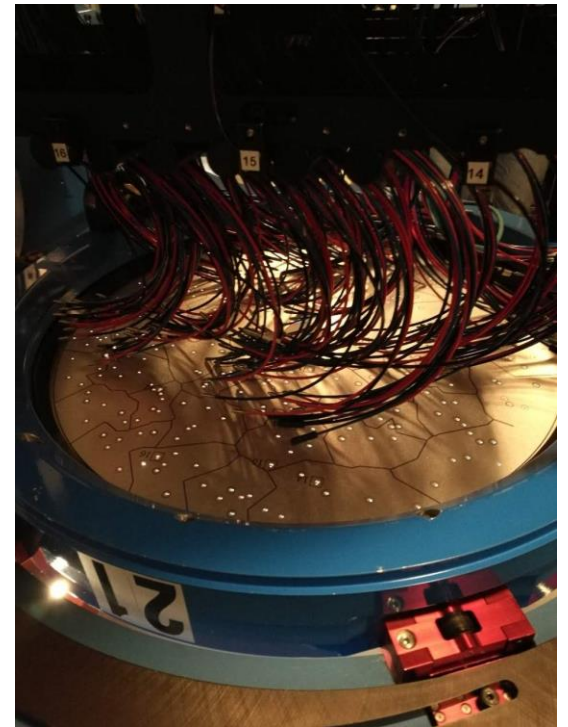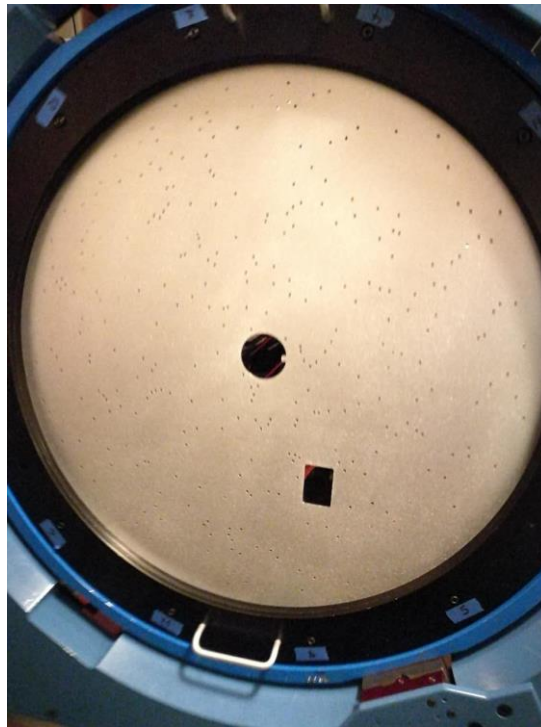2017 SDSS IV collaboration meeting
Santiago

APOGEE-S

- 2017-2020
  - Du Pont 100-inch telescope
    - FOV: 1.45 deg

TDSS(Time-Domain Spectroscopic Survey)

TDSS

Overview:

Three principal components of TDSS, piggy-back on **eBOSS**

Main survey

TDSS main (90%) survey: SES=single-epoch spectroscopy BOSS classification/characterization spectra of imaging variables from Pan-STARRS 1, 3π imaging survey (PS1); $\sim10^5$ fibers in SDSS-IV ($10/deg^2$)

eBOSS ELG plates

TDSS (10%) FES=few-epoch spectroscopy of potential spectral variables of unusual interest (e.g., known from SDSS I-IV spectra) $\sim10^{3-4}$ fibers in SDSS-IV

TDSS RQS=repeat quasar spectroscopy of SDSS 1-1V quasars; $\sim10^4$ fibers in SDSS-IV

101 talk: Variability in Stars
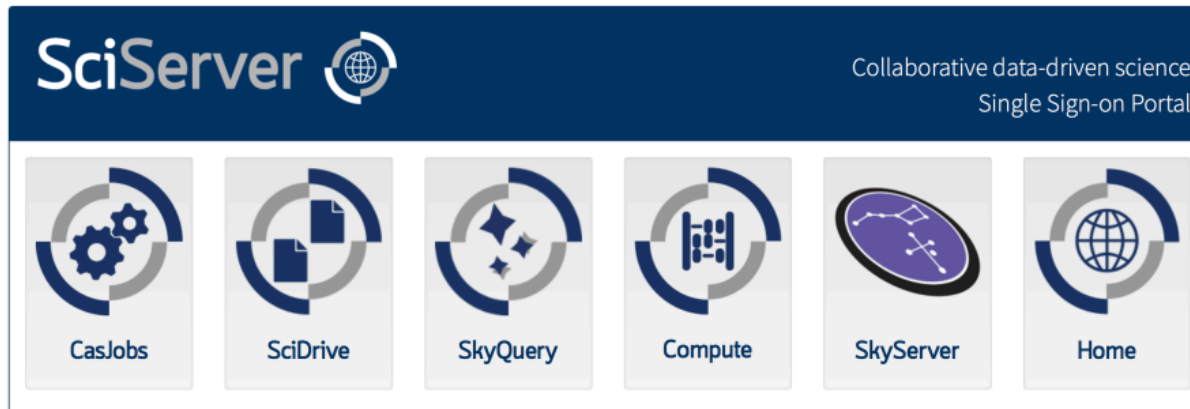
Every star is variable

Extrinsic	Occultations	Microlensing Solar System bodies
	Eclipses/RV shifts	Planets Binaries
	Rotation	Magnetic Spots Pulsars Clouds
Intrinsic	Convection	Granulation Vibration
	Magnetic	Magnetic Spots Flares/CME
	Pulsators	Cepheids RR Lyrae Delta Scuti ZZ Ceti/GW Vir Long Period Variable
	Eruptive	Supernovae Symbiotic Novae CVs

Sciserver

SciServer
Collaborative data-driven science
Single Sign-on Portal

CasJobs   SciDrive   SkyQuery   Compute   SkyServer   Home

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jupyter Week4_HR-Diagrams_Modeling_Class Last Checkpoint: 13 hours ago (autosaved)

File   Edit   View   Insert   Cell   Kernel   Help   Python 3 ○

Markdown ▼   CellToolbar

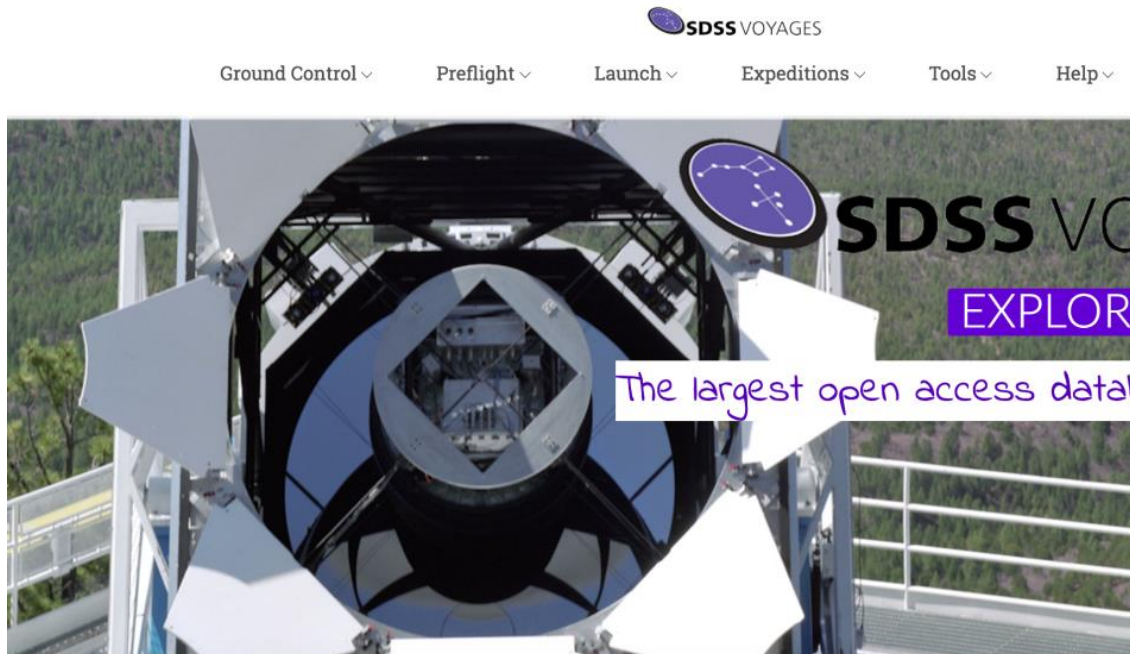## SDSS Activity: Modeling H-R Diagrams

Today we will apply numerical models of stellar evolution to determine the distance, metallicity, and age of globular clusters observed in the SDSS. You may find it useful to refer to the project background and helpful hints posted here: http://test.voyages.sdss.org/hr-diagrams/

```
In [1]:  # Step 1: Define your unique token and make it available as a
         #   system variable for the length of your current session.
         #
         # This will usually be the first code block in any script you write.
         #
         # with open('/home/idies/keystone.token', 'r') as f:
         #       token = f.read().rstrip('\n')
```
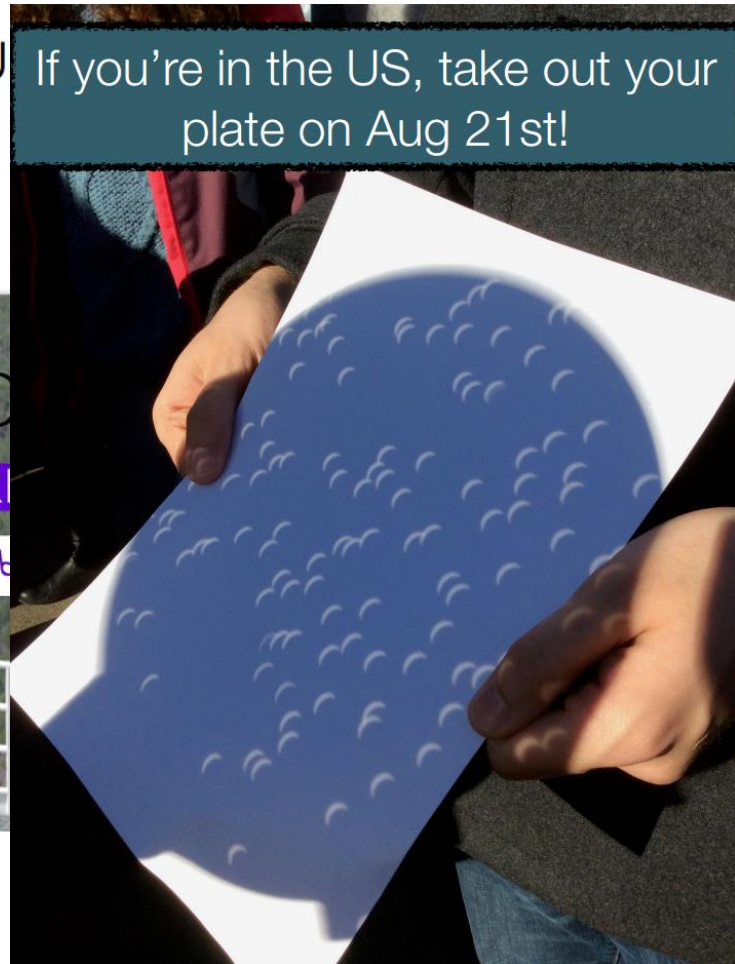
EPO(Education and Public Outreach with SDSS)

SDSS Voyages:
Next Generation Educational Activities Using the Sloan Digital Sky Survey

SDSS VOYAGES

Ground Control ∨   Preflight ∨   Launch ∨   Expeditions ∨   Tools ∨   Help ∨

SDSS VOYAGES

EXPLORE

The largest open access datab

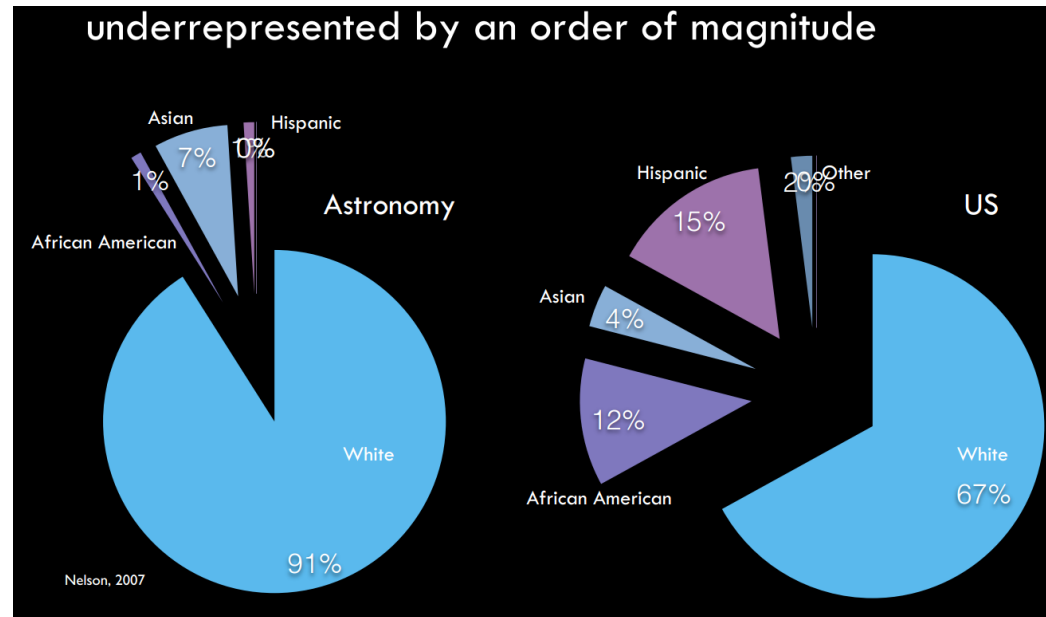http://voyages.sdss.org

If you're in the US, take out your plate on Aug 21st!
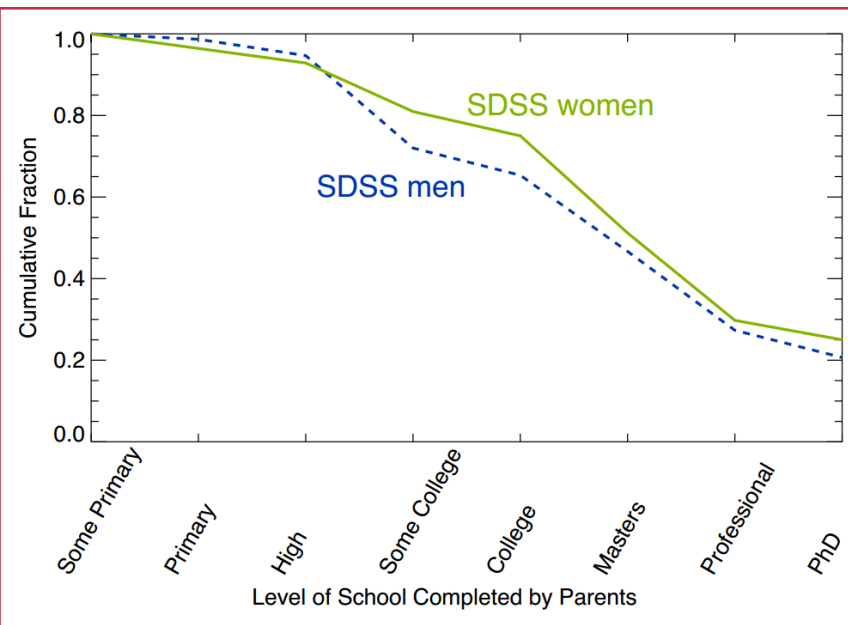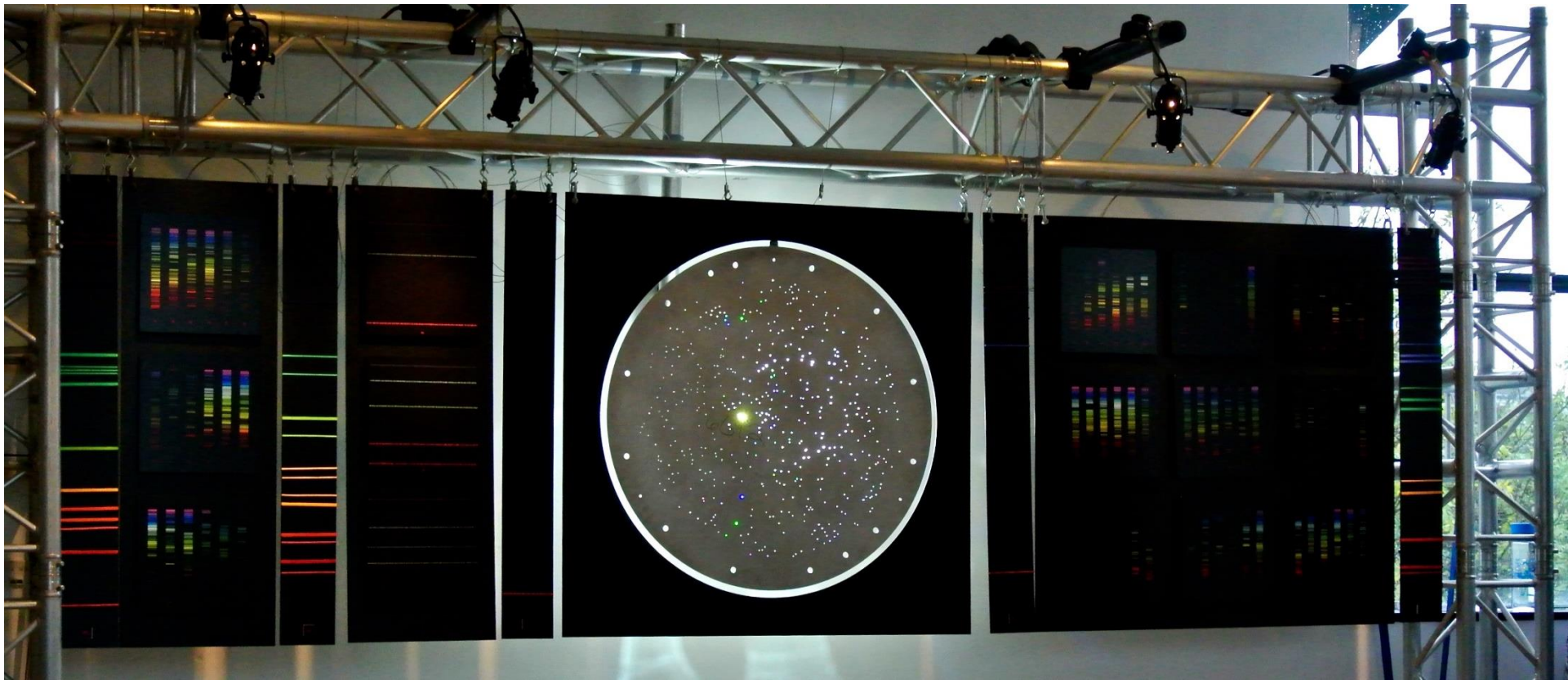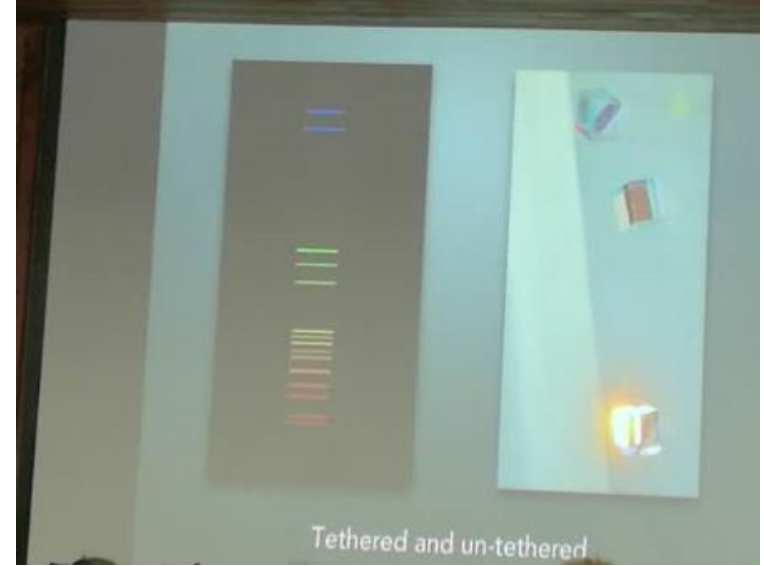
COINS report

- COINS: the Committee On INclusion in SDSS

Tim Fitzpatrick

- Meet the Artist in Residence
- Artist's Meeting Summary

Recover the star formation history of galaxy from full-spectrum fitting

- Non-trivial task
  - ill-posed problem
  - Dust-age-metallicity degeneracy

- Two new ideas
  - Chemical evolution model
  - Prior on SFH of galaxies

- Move to Python!