


PHY 517 / AST 443:
Observational Techniques in Astronomy

Final Presentations

Going to a conference

A stylized poster for the 'Cool Stars 16' workshop. The background is a light blue sky. In the foreground, there is a black silhouette of the Seattle skyline, including the Space Needle. A large, bright yellow sun with a red center is positioned on the right side of the skyline. Several smaller, solid-colored circles in red, purple, and blue are scattered across the sky, representing stars or planets. The text 'COOL STARS 16' is at the top in large, bold, black letters. Below it, in smaller black letters, is '16TH CAMBRIDGE WORKSHOP ON COOL STARS, STELLAR SYSTEMS, AND THE SUN'. At the bottom right, the dates '29 AUG - 2 SEPT 2010' and the location 'SEATTLE, WASHINGTON' are written in bold, black letters. At the very bottom, the website 'HTTP://WWW.CONFCON.COM/COOLSTARS16' is listed in a smaller font.

COOL STARS 16

16TH CAMBRIDGE WORKSHOP ON COOL STARS,
STELLAR SYSTEMS, AND THE SUN

29 AUG - 2 SEPT 2010
SEATTLE, WASHINGTON

[HTTP://WWW.CONFCON.COM/COOLSTARS16](http://www.confcon.com/coolstars16)

1-5 JULY 2013
SESTO (BZ)
ITALY

SnowDARK 2013

A stylized graphic featuring a white silhouette of a skier in mid-jump, positioned above a white mountain peak. The background is a dark, cosmic scene filled with numerous yellow and white stars, and vibrant nebulae in shades of blue, purple, and pink. The overall composition is set against a light gray background at the top, which contains the text 'SnowDARK 2013' in a red, serif font.



**ASTRONOMY'S
NEXT-GENERATION
OBSERVATORY**

Thirty Meter Telescope Science Forum

Save the Date: The Thirty-Meter Telescope Observatory
will host the inaugural "TMT Science Forum" on

July 22 and 23, 2013

at the

Waikoloa

Resort on the island of Hawaii.





The TMT is an international project to build and operate a 30-m telescope located on Mauna Kea, HI. The program will consist of talks and workshop discussions exploring science, first-light and future instruments, observatory operations, archiving and data products, key projects and cross-partnership collaborations, astronomy education and science, technology, engineering, and math (STEM) opportunities.

More information and the Forum program can be found at
<http://conference.ipac.caltech.edu/tmts/>

If you are interested in attending the Forum, register at the conference website. As part of the NSF-TMT agreement, some travel funding will be available for U.S. community members (who are not at TMT institutions) to attend the forum. To request consideration for travel funding, send an email to TMT@nso.edu with your name, institutional affiliation, and areas of interest relevant to TMT.



ALIBRA
Astronomical
Lighting
Initiative
for
Biodiversity
Research



CALTECH
California Institute
of Technology



DSTI
Department of
Science and
Technology
Initiative



NACU
National
Astronomy
Council



NACJ
National
Astronomy
Council
Japan



UC
University of
California



NSF
National Science
Foundation

Instituto Avanzado de Cosmología - Carnegie Mellon University

Cosmology on the beach 2016

Essential Cosmology for the Next Generation

January 10th to 16th, 2016
Iberostar Turon/Quetzal
Playa del Carmen, Mexico
Information:
<https://sites.google.com/site/cosmologyonthebeach2016/home>

INVITED LECTURES:
Raphael Fugger (CMU)
Karin Heitmann (Cosmological Simulations)
Claudia Maraston (Galaxy Formation)
Viri Perchat (Large Scale Structure)

INVITED PLENARY SPEAKERS:
Eric Linder
Marilena LoVerde
Rishabh Jain
Andrea Sandoval
Stefano Profumo
and more TBC.

SCIENTIFIC COMMITTEE
Mario Rodríguez (ININ, IAC)
Gustavo Niz (Universidad de Guanajuato, IAC)
Jorge Cervantes (ININ, IAC)

ORGANIZING COMMITTEE
Jorge Cervantes (ININ, IAC)
Rupert Croft (Carnegie Mellon University)
Molina Delgado (Carnegie Mellon University)



The meeting will focus on three main topics:

- The matter distribution in clusters from different probes
- The role of various subclusters and their galaxy populations
- Cosmology and large-scale structure of the Universe.

Scientific Organising Committee
 C. Bayliss (Edinburgh), J. van Marck (Leuven), J. Bregman (Leuven), J. Bregman (Leuven),
 S. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven),
 S. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven),
 J. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven).

Local Organising Committee
 A. C. M. (Leuven), J. Bregman (Leuven), J. Bregman (Leuven), J. Bregman (Leuven).

Registration close on 10th March 2012

The meeting will be held at the beautiful conference center in the beautiful Italian Dolomites.

www.sexten-cfa.eu • sesto13@oats.inaf.it

[illegible]

Goals for a conference attendance

- tell people about your awesome work !
- learn about the current hot topics in your field
- network

Conference format

- talks:
 - review / plenary talks
 - contributed talks (have to apply for these)
- posters:
 - displayed for the full duration; often dedicated poster session
 - often with “lightning talk” session
- social events (usually conference dinner)

PHY517/AST443 Final presentations

- graduate students: make a poster + 1 minute “lightning talk”
- undergraduates: give a presentation; 12 minute talk + 3 minutes questions

PHY517/AST443 Final presentations

- ~~graduate students: make a poster + 1 minute “lightning talk”~~
- undergraduates: give a presentation; 12 minute talk + 3 minutes questions

Final presentations

- **Wed., May 7** (last day of class)
- For each presentation, you will fill out a grading rubric and assign a score (0-10). We will pass them to the presenter after anonymizing the feedback.
- The SBU astronomy group will be invited to listen in

Topics

- coordinate with your lab partner: one of you will present your Lab 2, the other one your Lab 3
- if you do research in **observational astronomy**, you can present your research instead of a Lab

Presentation structure

- Title (slide):
 - Title: be descriptive! (I.e. NOT “AST443 Final Presentation”)
 - Speaker name, with affiliation
 - Co-authors
 - Venue, date
 - Good to include: affiliation logo, funding source logo (if applicable), pretty picture relevant to your talk
 - Posters: good to include picture of yourself so that people can come find you

Presentation structure

- Background / introduction
 - Present the big picture
 - Introduce the main concepts
 - Describe your target
 - Summarize previous work
 - Clearly state the question(s) your project addresses

Presentation structure

- Data / observations
 - Equipment
 - Important information depends on project, e.g.
 - Date of observations (time-variable observations)
 - Filter (imaging)
 - Grating (spectroscopy)
 - ...

Presentation structure

- Data analysis and measurements
 - “Basic” data reduction does not have to explained (but can be mentioned) - by now, everybody should know what a dark frame is
 - Describe analysis choices, e.g. lightcurve binning + estimates of uncertainties
 - Describe measurements clearly, e.g. transit depth

Presentation structure

- Inferred physics and interpretation
 - E.g. ratio of planet/star size
 - Comparison to expectations / literature

Presentation structure

- Conclusion
 - Summarize the main points that you want your audience to take away
 - Can include next steps, future work, etc.

How to give a good talk

- Know your audience!
- Aim: *everyone* should get something out of your talk
 - Include enough background information
 - Avoid too much jargon
 - Avoid too many equations
 - Tell a coherent story

How to give a good talk

- Slides: visual aids to your story
 - Assume ~1-2 minutes / slide
 - Don't put too much "stuff" on one slide
 - Include relevant **pictures / figures**
 - Prefer concise keywords to full sentences (let alone paragraphs)
 - Make everything legible (e.g., axis labels)
 - Use color and font style / size to highlight points, but **Don't overDO** IT
 - Don't use yellow, light green, low-contrast colors

How to give a good talk

- Speaking:
 - Don't speak too fast
 - Prepare not just your slides, but also what you will say
 - ... but don't memorize your talk, **speak freely**
 - *Your tone and articulation play an important part in conveying your story*
 - Engage with your audience - make eye contact
 - Avoid too many “umm”s - better to pause
 - **Practice** your talk, more than once, with different people!

How to give a good talk

- References, and avoiding plagiarism
 - Make sure to give proper credits
 - Every figure (that you did not make) needs to reference the author
 - Every research result needs to be properly cited with author / collaboration name + year; good to include journal, etc. *on the slide it is shown*
 - Visibly acknowledge your co-authors when presenting your own research, e.g. on title slide

Practicalities

- You'll have to tell me your title ahead of time (for scheduling)
- Send me your talk in [google slides](#) or [pdf](#) format, well before the start of class