

The University of California High-Performance AstroComputing Center (UC-HiPACC)
2012 Science/Engineering Journalism “Boot Camp”
on
COMPUTATIONAL ASTRONOMY: FROM PLANETS TO COSMOS
June 24-27, 2012

****Preliminary**** Agenda (as of March 26, 2012)

**Unless noted, every 60-minute session will consist of a 45-minute “mini-course”
followed by 15 minutes of active Q&A and discussion;
all speakers below are confirmed, but times, topics, and titles are subject to change**

Sunday, June 24

Afternoon

Arrival at Mission Inn, Santa Cruz, CA

5:00-8:30 PM

Afternoon get-acquainted reception and early dinner hosted by UC-HiPACC director Joel R. Primack and his wife Nancy E. Abrams at their house

Monday, June 25

8:00 AM

Continental breakfast, UC Santa Cruz (location TBA)

8:30 – 8:45 AM -

Welcome; Introduction to the Computational Astronomy Journalism Boot Camp and to UC-HiPACC – Trudy E. Bell, Senior Writer, UC-HiPACC

8:45 – 9:15 AM -

Introduction: How and why computation is transforming astronomy - Joel R. Primack, Director, UC-HiPACC, UCSC

9:15 – 10:15 AM -

Supercomputing Hardware and Codes for Astrophysics – Michael Norman, Director, San Diego Supercomputer Center, UCSD

10:15 – 10:30 –

Coffee break

10:30 – 11:30 AM -

Instrumentation: The Secrets of Adaptive Optics – Claire E. Max, UCSC

11:30 – 12:30 PM -

“Probing Nature's Highest Energy Particle Accelerators” – Brenda Dingus, Los Alamos National Lab (PI, High Altitude Water Cerenkov detector)

12:30 – 2:00 PM –

Tour of on-campus University of California Observatory Instrument Laboratories; followed by picnic lunch (provided)

2:00 – 3:00 PM -

“Probing the Galactic Planetary Census: Methods for Discovering and Characterizing Exoplanets – Gregory P. Laughlin, UCSC (Professor, Astronomy and Astrophysics)

3:00 – 4:00 PM -

Explosive Astrophysics: Supernovae and Neutrinos – George M. Fuller, UCSD

4:00 – 4:30 PM -

Iced tea break and GROUP PHOTOGRAPH (weather permitting)

4:30 – 5:30 PM -

Galactic Astronomy and Galactic Cannibalism – James S. Bullock, UCI

- 5:30 – 6:30 PM -** Break (long enough to allow time for a brisk walk around upper campus)
- 6:30 PM** Reception and banquet on campus; keynote speaker: Sandra M. Faber, UCSC

Tuesday, June 26

- 8:00 AM** Continental breakfast, UC Santa Cruz (location TBA)
- 8:30 – 8:45 AM -** Announcement of logistics for the Wednesday 6/27 field trip
- 8:45 – 9:45 AM -** “Filling the Cosmos with (Virtual) Stars” – Mark Krumholz, UCSC (Assistant Professor, Astronomy and Astrophysics)
- 9:45 – 10:00 AM** Coffee break
- 10:00 – 11:00 AM -** “How the Universe Evolved from Smooth to Lumpy: The Formation of Galaxies and Massive Black Holes” – Eliot Quataert, UCB (Thomas and Alison Schneider Chair in Physics; Director of the Theoretical Astrophysics Center)
- 11:00 – 12:00 PM -** “Dark Matter and Dark Energy: Working with the Dark Side to Discover the Ultimate Fate of the Universe” – Kim Griest, UCSD (Professor of Physics)
- 12:00 – 1:00 PM -** Lunch (provided)
- 1:00 – 2:00 PM -** “The Cosmic Dawn: Illuminating a Dark Universe” – Steven Furlanetto, UCLA (Associate Professor of Physics and Astronomy)
- 2:00 – 3:00 PM -** The Nature of Mysterious Dark Matter – Manoj Kaplinghat, UCI
- 3:00 – 3:30 PM -** Iced tea break (and group photograph if weather did not cooperate on Monday)
- 3:30 – 4:30 PM -** A Concise Tour of Astronomical Simulations and Visualizations – Joel R. Primack, UCSC
- 4:30 – 6:00 PM -** “News from Deep Space! A Roundtable Discussion on Covering Astronomy” – Journalism Roundtable Discussion led by Robert Irion, UCSC (Director, Science Communication Program)
- 6:00 – 6:15 PM -** Review of logistics for Weds. field trips; distribute and fill out evaluation forms

Wednesday, June 27 – Field trips [still working out specific logistics]

Morning NASA Ames, Moffett Field, Mountain View – behind-the-scenes with the Pleiades supercomputer, Hyperwall visualization facilities

Lunchtime Lunch at the California Academy of Sciences, San Francisco

Afternoon	California Academy of Sciences – behind the scenes of digital visualization at Morrison Planetarium, including optional planetarium show on earthquakes
Late afternoon	Private presentation of Morrison Planetarium shows "Fragile Planet" and "LIFE: A Cosmic Story"
7:00 PM	Dinner on your own in San Francisco
DEPARTURE	(participants make their own hotel and/or departure arrangements)

PRELIMINARY!