



THE UNIVERSITY OF CALIFORNIA HIGH-PERFORMANCE ASTROCOMPUTING CENTER (UC-HiPACC)

PRESENTS A

SCIENCE/ENGINEERING JOURNALISM BOOT CAMP



COMPUTATIONAL ASTRONOMY : FROM PLANETS TO COSMOS

Sunday, June 24 – Wednesday, June 27, 2012
University of California, Santa Cruz

WHAT: A Science/Engineering Journalism Boot Camp on "Computational Astronomy: From Planets to Cosmos" is a backgrounder for a select group of 12 to 16 practicing science or engineering journalists from all media—print, online, broadcast, social media, and film—whether on staff or freelance. The intensive immersion experience is sponsored by the University of California High-Performance AstroComputing Center (UC-HiPACC).

WHEN: From an evening reception, Sunday, June 24, 2012, through Wednesday, June 27, 2012.

WHERE: On Monday (June 25) and Tuesday (June 26), sessions will be held on the campus of the University of California, Santa Cruz—home to the University of California Observatories (UCO), the Center for Adaptive Optics, and the Santa Cruz Institute for Particle Physics—and will include an on-campus field trip to the famous UCO Instrument Laboratories. Wednesday (June 27) will be an all-day field trip to two institutions leading in astrocomputing and visualization: NASA Ames Research Center (to see the Pleiades supercomputer and the 128-screen

The University of California High-Performance AstroComputing Center (UC-HiPACC), based at the University of California, Santa Cruz, is a consortium of nine University of California campuses and three Department of Energy laboratories (Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory). UC-HiPACC does not directly fund research; instead, it fosters collaborations among researchers at the various sites by offering travel and other grants. It also sponsors an annual two-week summer school on special topics in computational astronomy for graduate students, co-sponsors workshops and other meetings, and facilitates education and public outreach. More information appears at <http://hipacc.ucsc.edu>.

Hyperwall) and the California Academy of Sciences (including the digital Morrison Planetarium).

WHO: Sessions will be led by top astrophysics faculty from across the campuses of the University of California system and from affiliated Department of Energy National Laboratories. A round-table session will discuss journalistic challenges, such as accurately portraying complex techniques and exciting science when industry pressures are toward ever shorter stories.

WHY: Data-intensive techniques are revolutionizing observation and theory in astronomy, and supercomputer simulations of mysterious dark matter are transforming cosmology virtually into an experimental science. How can science journalists cover such novel findings and techniques for general readers without getting bogged down in bytes and flops?

HOW: Details, agenda, and application form are available from

<http://hipacc.ucsc.edu/2012CAJBC.html>.

Application form plus all supporting materials are due to UC-HiPACC by Friday, March 30, 2012. Expenses for the Journalism Boot Camp will be underwritten by UC-HiPACC. In addition to the program and field trip, participating journalists will receive housing for four nights (June 24-27), local transportation, most meals, and reimbursement of up to US \$800.00 for long-distance travel. Journalists selected will be announced in April.

CONTACT: Trudy E. Bell, M.A., senior writer for UC-HiPACC, at tebell@ucsc.edu.

CONFIRMED FACULTY:

- James S. Bullock**, UC Irvine (Director, Center for Galaxy Evolution)
- Brenda Dingus**, Los Alamos National Lab (Principal Investigator, High Altitude Water Cerenkov detector)
- Sandra M. Faber** UC Santa Cruz, banquet speaker (University Professor of Astronomy)
- George M. Fuller**, UC San Diego
- Steven Furlanetto**, UC Los Angeles
- Kim Griest**, UC San Diego (Chair, US Astronomy and Astrophysics Advisory Committee)
- Robert Irión**, UC Santa Cruz, round-table discussion leader (Director, Science Communication Program)
- Manoj Kaplinghat**, UC Irvine
- Mark Krumholz**, UC Santa Cruz
- Gregory P. Laughlin**, UC Santa Cruz (Chair, UCSC Astronomy and Astrophysics Department)
- Claire E. Max**, UC Santa Cruz (Director, Center for Adaptive Optics)
- Michael Norman**, UC San Diego (Director, San Diego Supercomputer Center)
- Joel R. Primack**, UC Santa Cruz (Director, UC-HiPACC)
- Eliot Quataert**, UC Berkeley (Director, Theoretical Astrophysics Center)



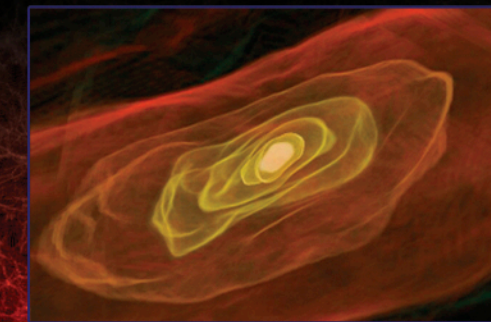
Active Galactic Nucleus: Centaurus A. NASA



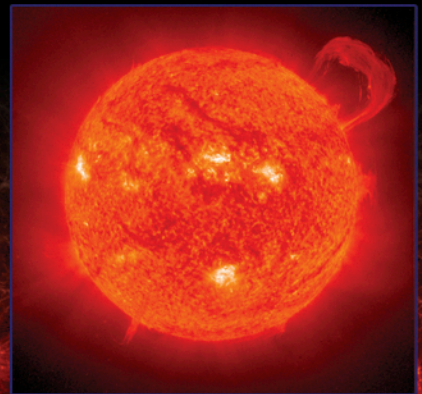
Jupiter in Morrison Planetarium. CalAcademy



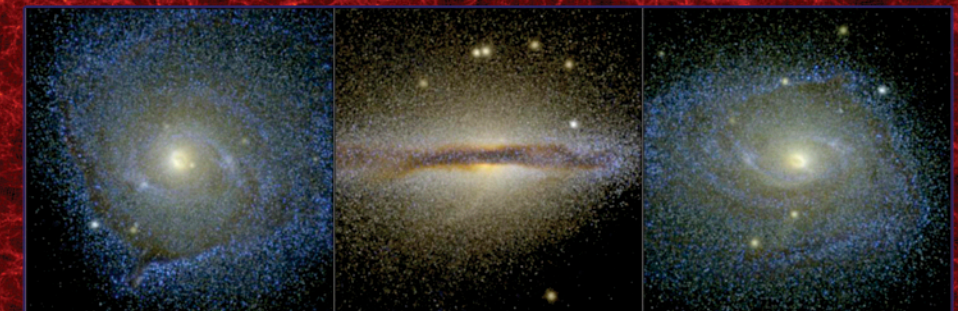
NASA Ames Hyperwall. Joe McNally



First Star Simulation. T. Abel



Solar Winds. NASA



Galaxy Formation Simulations. C. Moody

Background image: Bolshoi cosmological simulation. Klypin, Primack, Gottloeber