

****PLEASE NOTE CHANGE IN DAY & LOCATION FOR THIS WEEK'S PHYSICS COLLOQUIUM****

PHYSICS COLLOQUIUM

Partially funded by the GSFEI

Ansantha Cooray
California Institute of Technology

**“AFTER WMAP: NEXT GENERATION
CMB”**

TUESDAY, JANUARY 20, 2004

4:00 P.M., Rm. A-118, PAA

Reception at 3:45 p.m. in the lobby

SEMINARS
January 20-23, 2004

Abstract: The Wilkinson Microwave Anisotropy Probe (WMAP) measured, primarily, fluctuations in the intensity, or temperature, of the cosmic microwave background (CMB). The interest is now on the precise detection of CMB polarization and the measurement of its anisotropy structure. A certain aspect of the polarization distribution is expected to contain a signature of gravitational waves that were generated at the earliest times of the universe during the inflationary epoch. With a high recommendation from the National Research Council, NASA now considers the detection of this primordial gravity wave background, a smoking-gun signature of inflation, as one of its highest priorities over the next decade. We will discuss theoretical aspects of this signature, issues related to its detection, and what we will learn about the universe with the Exploration Probe of Inflationary Cosmology (EPIC) mission.

Tuesday, January 20, 2004

INT Seminar

11:00 A.M., Rm. C-421, PAT

Michaela Oswald, Niels Bohr Institute

“COVARIANT DERIVATIVE EXPANSION OF QCD EFFECTIVE ACTION AT HIGH TEMPERATURES”

Particle Theory Seminar

2:30 P.M., Rm. C-421, PAT

Mark Wise, Caltech

TBA

Wednesday, January 21, 2004

Special Particle Theory Seminar

2:30 P.M., Rm. C-421, PAT

Holger Nielsen, Niels Bohr Institute

“HIERARCHY-PROBLEM AND A NEW BOUND STATE OF $6t$ AND 6 ANTI- t ”

Thursday, January 22, 2004

Astronomy Colloquium

4:00 P.M., Rm. A-102, PAA

Eric Wilcots, Astronomy Department, University of Wisconsin

“HI IN THE ENVIRONMENT OF GALAXIES”

Friday, January 23, 2004

Issues for Ethnic Minorities and Women in Science and Engineering Seminar

1:30 pm, Rm. A-114, PAA

Eugene Cota-Robles, Professor Emeritus, UC Santa Cruz

“ADVANCING THE COMPETITIVE CREDENTIALS OF MINORITY SCIENCE UNDERGRADUATES”

Particle Astrophysics Seminar

3:30 pm, Rm. A110, PAA

R. J. Wilkes, UW

“NEWS FROM JHF/JPARC”