

# V INPE ADVANCED COURSE ON ASTROPHYSICS

## *An Overview of Cosmology in the Era of Large Telescopes: Theory, Observations and Simulations*

September 16 - 20, 2013

*In honor of Prof. José Antônio de Freitas Pacheco*

### Invited Lecturers

**Dr Brice Menard**  
(John Hopkins Univ., USA)  
Large Scale Structure of the  
Universe - Large Surveys

**Dr Graça Rocha**  
(Caltech/JPL, USA)  
CMB/Planck

**Dr John Leslie**  
(Univ. of Guelph, Canada)  
The Mystery of Existence:  
Why is there anything at all?

**Dr Krzysztof M. Gorski**  
(JPL/Caltech, and Warsaw  
University Observatory, USA  
and Poland)  
Flattening the Sphere:  
HEALPix - Concept and  
Applications to Effective  
Handling and Analysis of  
Full Sky Data Sets

**Dr Neal Katz**  
(Univ. of Massachusetts,  
USA)  
Cosmological Simulations



### Advisory Board

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(U. Chicago, USA)

**Dr E. Kolb**  
(Fermilab, USA)

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(Princeton Univ., USA)

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(CBPF, Brazil)

**Dr M. Strauss**  
(Princeton Univ., USA)

**Dr R. Brandenberger**  
(Brown Univ., USA)

**Dr R. Carlberg**  
(U. Toronto, Canada)

**Dr R. R. de Carvalho**  
(INPE, Brazil)

**Dr S. Carroll**  
(Caltech, USA)

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