2nd INTERNATIONAL SEMINAR 2008

Universidad Complutense Madrid

MINISTERIO DE EDUCACIÓN Y CIENCIA

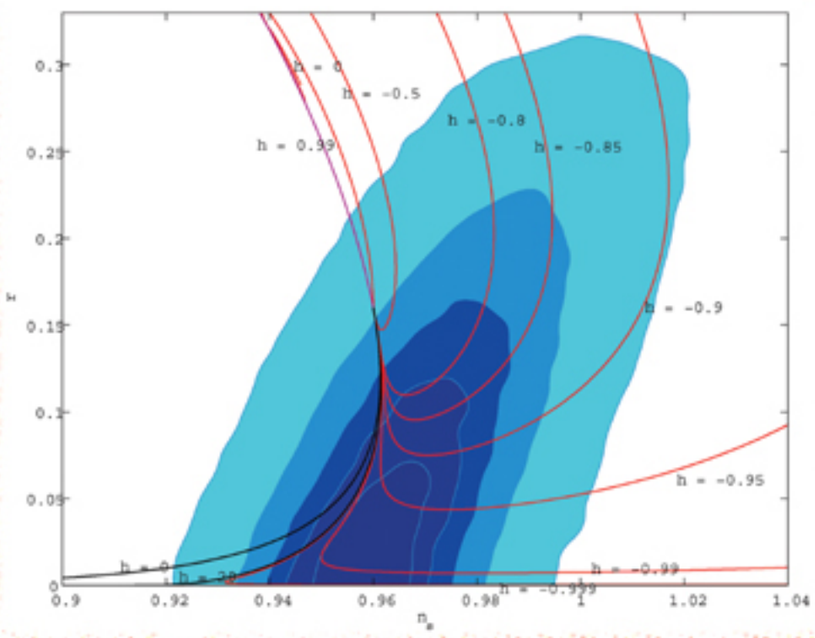
Ecole Internationale Daniel Chalonge

2010 BICENTENAIRE DE L'ARGENTINE

PHYSICS OF THE UNIVERSE: IMPLICATIONS OF THE RECENT OBSERVATIONS

FACULTY OF PHYSICS, U. COMPLUTENSE DE MADRID

7-9 May 2008, Madrid, Spain



PROGRAMME and LECTURERS INCLUDE

- **Fernando ARQUEROS** (Dpt. Fisica Atomica, U. Complutense de Madrid, Spain) *Astrophysical implications of the AUGER observations*
- **Nicola BARTOLO** (Dpt. di Fisica. U. Padova, Italy) Non-gaussianity in the CMB
- **Alexey BOYARSKY** (CERN, Switzerland) Dark matter and observational constraints on light dark matter
- **Francisco J. CAO** (Dpt. Fisica Atomica, U. Complutense de Madrid, Spain) Generic Quantum Initial States for Inflation and its observable consequences: the CMB quadrupole suppression
- **Hector J. DE VEGA** (LPTHE, CNRS / U. Paris VI, France) The Effective Theory of Inflation, Dark Matter and Dark Energy in the Standard Model of the Universe
- **Claudio DESTRI** (Dpt. di Fisica, U. Milano-Bicocca, Italy) New Monte Carlo Markov Chain Analysis of WMAP 3-year data with the Effective Field Theory of Inflation
- **Maria Cristina FALVELLA** (Agenzia Spaziale Italiana, Rome, Italy) Measurements of the CMB by the PLANCK satellite and their implications
- **Daniel MAZIN** (IFAE, Barcelona, Spain) HESS and MAGIC data: Constraints on the Extragalactic Background Light from very high energy gamma-ray spectra of distant sources
- **Francesco PIACENTINI** (Planck Science Office, European Space Agency, Madrid, Spain) Unveiling the early Universe: milestones in CMB observations
- **Marina RAMON MEDRANO** (Dpt. Fisica Teorica I, U. Complutense de Madrid, Spain) Semiclassical and Quantum de Sitter regimes
- **Rafael REBOLO** (IAC, Tenerife, Spain) Experimental efforts to measure the CMB polarization: the QUIJOTE CMB experiment
- **Norma G. SANCHEZ** (LERMA, CNRS/Observatoire de Paris, France) Understanding of Inflation, Dark Matter and Dark Energy in the Standard Model of the Universe
- **Marco TAVANI** (INAF-IASF Roma / U. Roma, Italy) Gamma ray observations with AGILE and their implications
- **Jose W. F. VALLE** (IFC, CSIC/U. Valencia, Spain) Neutrinos in Cosmology

... And Other Lecturers

PURPOSE AND TOPICS

The accurate astrophysical observations available now provide unprecedented information about the Universe. This information and the even better forthcoming observations call for renewed efforts to provide precise theoretical predictions. In this context, the aim of this seminar is to contrast recent advances in theoretical predictions with the observational results.

Organization

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