



Conference Programme

Sunday 1st September

18:30 BUFFET RECEPTION

Monday 2nd September

Particle Physics

09:00 Opening & Registration

09:40 **Lars Sonnenschein** *CERN*
Recent results from the LHC

10:20 **John Ellis** *King's College London*
From the Higgs boson to cosmology

11:00 COFFEE

11:30 **Malcolm Fairbairn** *King's College London*
Evidence for dark matter

12:10 **Silvia Pascoli** *Institute for Particle Physics Phenomenology, Durham*
Neutrino masses: experiments versus cosmological observations

12:50 LUNCH

14:00 PARALLEL SESSIONS

Tuesday 3rd September

Cosmic Microwave Background

09:00 **George Efstathiou** *University of Cambridge*
Planck satellite results

09:40 **Jo Dunkley** *University of Oxford*
Cosmology from the small-scale CMB

10:20 **John Kovac** *Harvard University*
B-modes from the ground

11:00 COFFEE

- 11:30 **Ben Wandelt** *Institut Astrophysique de Paris*
Fundamental physics from cosmology – Planck and beyond
- 12:10 **David Spergel** *Princeton University*
Cosmology after Planck: small-scale CMB experiments
- 12:50 LUNCH
- 14:00 PARALLEL SESSIONS
- 18:00 GRUBER COSMOLOGY PRIZE CEREMONY
- 19:00 DRINKS RECEPTION

Wednesday 4th September

Large-Scale Structure

- 09:00 **Uros Seljak** *UC Berkeley*
Galaxy clustering and weak lensing: current observations and theoretical challenges
- 09:40 **Simon White** *Max Planck Institute for Astrophysics*
Insights into the nature of dark matter from numerical simulations
- 10:20 **Matias Zaldarriaga** *Institute for Advanced Study, Princeton*
The effective theory of large-scale structure
- 11:00 COFFEE
- 11:30 **Ue-Li Pen** *Canadian Institute for Theoretical Astrophysics*
21cm cosmology
- 12:10 **Andreas Ringwald** *Deutsches Elektronen-Synchrotron*
The quest for axions and other WISPs
- 12:50 LUNCH
- 14:00 FREE
- 17:00 PUBLIC TALKS
Andrew Liddle *Institute for Astronomy, University of Edinburgh*
Brian Cox *University of Manchester*
Stephen Hawking *University of Cambridge*

Thursday 5th September

Primordial Cosmology

- 09:00 **Liam McAllister** *Cornell University*
Many-field inflation

- 09:40 **Cliff Burgess** *McMaster University*
Naturalness and cosmology: does Planck give us a totally free hand?
- 10:20 **Joseph Conlon** *University of Oxford*
Dark radiation and a 0.1 – 1 keV cosmic axion background
- 11:00 COFFEE
- 11:30 **Thomas Hertog** *University of Leuven*
Quantum cosmological backgrounds: predictions and observations
- 12:10 **Slava Mukhanov** *LMU Munich*
Quantum cosmological perturbations: predictions and observations
- 12:50 LUNCH
- 14:00 PARALLEL SESSIONS
- 19:00 BANQUET

Friday 6th September

Cosmic Acceleration

- 09:00 **Ofer Lahav** *University College London*
Dark energy: observational probes and alternative models
- 09:40 **Lam Hui** *Columbia University*
Testing gravity
- 10:20 **Claudia de Rham** *Case Western Reserve University*
Dark energy and modified gravity
- 11:00 COFFEE
- 11:30 **Richard Easther** *University of Auckland*
Inflation: plus ça change?
- 12:10 **Edmund Copeland** *University of Nottingham*
Dark energy – modelling and testing for it
- 12:50 LUNCH

Conference ends