Cosmology at Queen Mary University of London

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London Cosmology Discussion Meeting 30/10/2014



The Cosmology Group at QMUL

The Cosmology and Relativity Group has two parts

- in School of Physics and Astronomy Astronomy Unit
- in School of Mathematical Sciences Applied Mathematics

for historical reasons: until 2011 Astronomy Unit was in SMS

Meet the group

Staff:

- Bernard Carr
- Tim Clifton
- James Lidsey
- Karim Malik
- David Mulryne
- Alexander Polnarev
- Will Sutherland
- Juan Valiente-Kroon (in the School of Mathematical Sciences)
- 2 new people to be hired by September 2015

Postdocs:

- STFC postdoc to be hired (interview next week)
- Shabnam Beheshti (in the School of Mathematical Sciences)

Meet the group continued ...

- PhD students:
 - Alex Leithes (with Malik)
 - Viraj Sanghai (with Clifton)
 - Sophia Goldberg (with Malik)
 - Pedro Carrilho (with Malik)
 - Edgar Gasperin (with Valiente-Kroon)
 - Shaillee Imrith (with Mulryne)
 - Charalambos (Charlie) Pittordis (with Sutherland)
 - ► Michael Cole (with Valiente-Kroon)
 - Adem Hursit (with Valiente-Kroon)
- Emeritus and visiting professors:
 - Alan Coley
 - George Ellis
 - Malcolm MacCallum
 - David Matravers
 - Reza Tavakol

Areas of research

- The physics of the early Universe and models of inflation
- Cosmic Microwave Background anisotropies
- Primordial Black Holes
- Large Scale Structure formation
- Large Scale Structure surveys
- Dark energy and modified gravity
- Inhomogeneous models of the universe
- Cosmological perturbation theory at linear order and beyond

Theme: At the moment mostly theory – *calculating observable effects, making theoretical predictions, comparing theory with observations.*