

DISC DYNAMICS & PLANET FORMATION

29 June-3 July 2015, UCLAN Cyprus, Larnaka

The connection between star formation, protostellar discs and planetary systems is unquestionable but the path from stars to planets is highly uncertain.

The discovery of the first exoplanet, a hot Jupiter, two decades ago, challenged planet formation theories and introduced the idea that planets migrate within their host disc towards the central star. In the last few years the discovery of wide-orbit exoplanets has similarly put planet formation theories to the test.

Are we confident that we know how protostellar discs form, what physical processes drive their evolution and how gas giants and terrestrial planets eventually form and interact with their parent discs?

This meeting aims at bringing together theorists and observers to discuss recent developments on the theory of disc dynamics and planet formation, how these fit with current observations, and what we may expect in the future.

Location: The conference will be held at the UCLAN Cyprus Campus on the outskirts of Larnaka in Cyprus.

Scientific Organising Committee

Richard Alexander (University of Leicester, UK)
 Phil Armitage (University of Colorado, USA)
 Benoit Commercon (ENS Lyon, France)
 Barbara Ercolano (Munich University, Germany)
 Sebastian Fromang (CEA, Saclay)
 Shu-ichiro Inutsuka (Nagoya University, Japan)
 Doug Lin (UCSC, USA)
 Giuseppe Lodato (Milan, Italy)
 Anders Johansen (Lund Observatory, Sweden)
 Ken Rice (University of Edinburgh, UK)
 Dimitris Stamatellos (UCLAN, UK) (Chair)

Local Organising Committee

Ben MacFarlane (UCLAN)
 Anthony Mercer (UCLAN)
 Liz Roberts (UCLAN)
 Dimitris Stamatellos (UCLAN; Chair)
 George Troullias (Kition Observatory, Cyprus)
 Derek Ward-Thompson (UCLAN)

Topics

- The formation of protostellar discs
- Observations of protostellar discs
- Disc accretion theory and disc dispersal
- Protostellar disc modeling: hydrodynamics, thermodynamics, magnetic fields, turbulence
- Planet formation; core accretion and disc fragmentation
- Disc-planet interactions and planet migration
- Late-phase evolution of planetary systems

Invited Speakers

Aurélien Crida (Nice, CNRS, Obs. de la Côte d'Azur, France)
 Geoffroy Lesur (Observatoire de Grenoble, France)
 James Owen (Princeton, USA)
 Sijme-Jan Paardekooper (Queen Mary, London, UK)
 Yusuke Tsukamoto (Riken, Japan)
 Neal Turner (JPL, Caltech, USA)
 Andrew Youdin (University of Arizona, USA)

