

**The Royal Society of Edinburgh**  
**Robert Cormack Bequest Meeting**

**University of Dundee**

**27 April 2009**

**Report by Sarah Parkes**

The Robert Cormack Bequest Meeting, supported by the Cormack Bequest Fund and the Scottish Universities Physics Alliance (SUPA), was held on Monday 27 April, hosted for the first time by the University of Dundee.

The aim of this annual meeting is to bring together astronomers, space scientists and those interested in astronomy, mainly post-graduate level students and post-doc researchers, to share their work and discuss the latest happenings in Scottish astronomy.

This year's meeting opened with a welcome from co-host Dr Steve Parkes, of the University of Dundee's Space Technology Centre. He also gave the audience an insight into the dynamic research being carried out in the Space Technology Centre.

The opening lecture, entitled *Sizing-up extra solar planets*, was given by Professor Andrew Collier Cameron from the University of St. Andrews. His fascinating presentation provided an overview of the latest research in the area of exoplanetary science, including some of the more unusual planet discoveries. Professor Cameron also presented the history of the UK Wide-Angle Search for Planets (WASP) which has become the world's most successful survey of bright transiting planets.

The welcome and opening lecture were followed by a series of contributed talks, by PhD Students and Researchers from across Scotland:

*The physical and chemical environment of a star-forming bright-rimmed cloud*  
Alison Craigmiles (University of Strathclyde)

*Stellar Encounters: A Stimulus for Disc Fragmentation?*  
Duncan Forgan (Institute for Astronomy, University of Edinburgh)

*Silicate, ruby and opal in the atmospheres of Brown Dwarfs and planets*  
Christiane Helling (University of St. Andrews)

*NIR and optical luminosity distributions and functions in MGC/GAMA*  
David Hill (University of St. Andrews)

*Cosmological Perturbations and Instabilities in Coupled Dark Energy and Dark Matter Models*  
Brendan Jackson (Institute for Astronomy, University of Edinburgh)

*Extrapolating Coronal Stellar Magnetic Fields*  
Colin Johnstone (University of St. Andrews)

*University of Dundee involvement with the ExoMars mission*  
Mark McCrum (University of Dundee)

*Fragmentation in Molecular Clouds and its Connection to the IMF*  
Rown J. Smith (University of St. Andrews)

*The Nature and Clustering of Star-forming Galaxies at  $z=0.84$*   
David Sobral (University of Edinburgh)

*The temperature structure around Quasars during Reionisation*  
Eric Tittley (Institute for Astronomy, University of Edinburgh)

*A new SMBH Mass Function for the Local Universe*  
Marina Vika (University of St. Andrews)

*Testing the stability of dwarf ellipticals in MOND*  
Xufen Wu (University of St. Andrews)

Posters on a variety of topics, including the first non-linear force-free Vlasov-Maxwell equilibrium and the development of comprehensive Lunar South Pole maps using a planetary surface simulation tool, were presented in a poster display by the following participants:

Gráinne Costigan (University of Dundee)  
Martin Feix (University of St Andrews)  
Scott Gregory (University of St. Andrews)  
Emma Grocutt (Institute for Astronomy, University of Edinburgh)  
Julia Kennedy (Institute for Astronomy, University of Edinburgh)  
Procheta Mallik (University of Glasgow)  
Dr. Thomas Neukirch (University of St Andrews)  
Jennifer Noble (University of Strathclyde)  
Hamish Reid (University of Glasgow)  
David Sobral (University of St Andrews)

The meeting closed with the presentation of the following prizes:

**Cormack Undergraduate Prize** – Mr William Simpson (University of St Andrews)  
*Coronal Null points and Solar Flares: a study of the topology of Active Regios AR0486 during the time of the X17.2 Flare*

**Cormack Postgraduate Prize** – Ms Jenny Richardson (Royal Observatory, University of Edinburgh)  
*An HCT/ACS view of the inhomogeneous outer halo of M31*

**Prize for Best Poster** – Ms Jennifer Noble (University of Strathclyde)  
*Probing the chemistry of molecular cores: 2.5 - 5 micro grism spectroscopy of B35A*

The meeting was followed by a tour and drinks reception at the Mills Observatory, Dundee, the only UK Observatory to have been built with the sole aim of encouraging public understanding of science.

This year's meeting attracted a total of 65 participants, from five Scottish Universities as well as members of the Dundee Astronomical Society and the Mills Observatory Advisory Group.

The 2009 Cormack Meeting programme may be viewed at:  
<http://spacetechnology.dundee.ac.uk/cormack-2009>