Wednesday 15th March 2017

08:45-09:00 Welcome by Christiane Helling

Session I Atmospheres of Exoplanets: Observations (Chair: C. Helling)

09:00-09:30 D. Apai: Extrasolar Storms, review (US)

09:30-09:45 D. Armstrong: The first detection of variability in a Hot Jupiter atmosphere (Warwick)

09:45-10:00 L. Delrez: Probing the emission spectra of two ultra-hot Jupiters using ground-based occultation photometry (Cambridge)

10:00-10:15 B. Biller: Discovering the youngest free-floating planets: a transformative survey of Taurus with the novel W-band filter (Edinburgh)

10:15-10:30 N. Nikolov: VLT FORS2 comparative transmission spectral survey of clear and cloudy exoplanet atmospheres (Exeter)

10:30-10:45 J. Spake: Spectroscopic phase curves of hot Jupiters (Exeter)

10:45-11:00 A. Triaud: A septet of earths in the TRAPPIST-1 system (Cambridge)

11:00-11:30 Coffee

Session II Atmospheres of Exoplanets: Modelling (Chair: I. Baraffe)

11:30-11:50 R. Pierrehumbert: Dynamics of condensible-rich atmospheres on tide-locked exoplanets (Oxford)

11:50-12:10 I. Boutle: Exploring the climate of Proxima B with the Met Office Unified Model (MET Office)

12:10-12:25 M. Hammond: Modelling the climate of 55 Cancri e (Oxford)

12:25-12:40 S. Lines: Cloud formation and evolution in hot Jupiter atmospheres (Exeter)

12:40-12:55 T. Louden: Modelling the phase curve and occultation of WASP-43b with SPIDERMAN (Warwick)

13:00-14:00 Lunch

14:00-15:30 Discussion sessions

* Heather Cegla & Raphaëlle Haywood: Discussion and Q&A: Stellar Activity in Exoplanet Surveys
* Nathan Mayne: Exoplanet modelling
* Paul Rimmer: Laboratory Exoplanet Science
* Sarah Rugheimer: Workshop on using the JWST simulator, PandExo

15:30-16:00 Coffee

16:00-16:15 V. Parmentier: Cloudy nights on exoplanets (Arizona)

16:15-16:30 G. Lee: Modelling combined scattering and emission spectra using Monte Carlo radiative transfer (St Andrews)
Thursday 16th March 2017

Session III  Detection and Characterisation of Exoplanets (Chair: D. Sing)

09:00-09:30  M. Jardine: Exoplanet environments, review (St Andrews)
09:30-09:45  E. Gillen: Young transiting planets in the K2 clusters (Cambridge)
09:45-10:00  A. Cameron: The CHEOPS transit photometry mission (St Andrews)
10:00-10:15  G. Tinetti: ARIEL-Atmospheric Remote-Sensing Infrared Exoplanet Large-survey (UCL)
10:15-10:30  C. Boehm/A.Sozzetti: THEIA-a new astrometry mission to search for exoplanets (Durham/INAF)
10:30-11:00  Poster pop-ups (chair: D. Forgan)

11:00-11:30  Coffee

11:30-11:45  S. Thompson: HARPS3 and the Terra Hunting Experiment (Cambridge)
11:45-12:00  H. Jones: Planets around nearby M dwarfs (Hertfordshire)
12:00-12:15  H. Cegla: Cautionary Tales of Rossiter-McLaughlin Analyses (Geneva)
12:15-12:30  M. Guenther: Needle in a haystack: distinguishing planets from false positives with NGTS (Cambridge)
12:30-12:45  I. Waldmann: Deep learning in exoplanet spectroscopy (UC London)
12:45-13:00  S. Casewell: The direct detection of an irradiated brown dwarf in an eclipsing binary (Leicester)

13:00  Conference photo

13:00-14:00  Lunch
14:00-15:30 Discussion sessions

* Amy Bonsor & Oliver Shorttle: Exoplanets: what can we learn from Earth?
* Sarah Casewell: Brown dwarfs as proxies for exoplanets
* Farzana Meru: The disc-planet connection: from planet formation to planet observations
* Vivien Parmentier: Prospects to understand cloudy exoplanets

15:30-16:00 Coffee

Session IV Properties of the host star (Chair: Y. Unruh)

16:00-16:15 A. Bonsor: The Compositional Diversity of Exoplanetary Material (Cambridge)

16:15-16:30 H. Giles: Determining starspot lifetimes from photometry to feed models of stellar activity in exoplanet RV surveys (Geneva)

16:30-16:45 K. Hay: How should limb darkening be constrained when fitting exoplanet system parameters from a transit? (St Andrews)

16:45-17:00 T. North: Weighing in on the masses of retired A stars with asteroseismology. Ensemble Kepler and K2 observations of exoplanet hosts (Birmingham)

17:00-17:30 Poster pop-ups (chair: D. Forgan)

19:00 Conference Dinner & Ceilidh (Don't forget to bring your coloured ticket)

Friday 17th March 2017

Session V Discs and Planet Formation (Chair: P. Woitke)

09:00-09:15 K. Rice: Disc fragmentation rarely forms planetary-mass bodies (Edinburgh)

09:15-09:30 M. Fletcher: An implicit integration scheme for dust grains in PHANTOM (Leicester)

09:30-09:45 M. Davies: Survival of habitable planets in unstable planetary systems (Lund)

09:45-10:00 A. Mustill: What do outer worlds do to inner planets? (Lund)

10:00-10:15 G. Rosotti: The origin of the eccentricity of the hot-Jupiter in CI Tau (Cambridge)

10:15-10:30 M. Kama: Observational studies of the C and O abundance in protoplanetary discs (Cambridge)

10:30-10:45 D. Veras: Explaining transits and variability with tidal disruption simulations of minor planets (Warwick)

10:45-11:00 D. Forgan: Advanced population synthesis models of planet formation via disc instability (St Andrews)

11:00-11:30 Coffee

11:30-12:30 Discussion session presentation

12:30-14:00 Lunch
Session VI: Links to the Solar System (Chair: C. Helling)

14:00-14:15  S. Mikhail: How to make an Earth, and not a Venus (St Andrews)

14:15-14:30  G. Hodosán: Lightning on exoplanets and brown dwarfs: modelling lightning energies and radio powers (St Andrews)

14:30-14:45  P. Rimmer: Prebiotic Chemistry on Other Worlds (Cambridge)

14:45-15:00  Wrap-up by old and new UKEXOM hosts

15:00  Farewell coffee