

# Thursday May 20

## 9:30 – 10:00 Welcome and Registration

10:00 – 10:20 D. Kong, K. Zhang, G. Schubert (Exeter and UCLA)  
The shape of two-layered rapidly rotating planets

10:20 – 10:40 K. Chan, K. Zhang, X. Liao (Hong Kong and Exeter)  
On libratorially driven flow in planetary ellipsoidal cores

10:40 – 11:00 Phil Livermore, Rainer Hollerbach (Leeds)  
MHD models of the Earth's core at extremely low viscosity

## 11:00 – 11:40 Coffee Break

11:40 – 12:00 Andrew Baggaley (Newcastle)  
Magnetic structures produced by the kinematic and saturated small-scale dynamo

12:00 – 12:20 Katy Richardson, Mike Proctor (Cambridge)  
Effects of alpha-effect fluctuations on simple nonlinear dynamo models

12:20 – 12:40 Binod Sreenivasan, Chris Jones (Leeds)  
Dipole generation and subcritical behaviour in the geodynamo

12:40 – 1:00 Piotr Boronski, Chris Jones (Leeds)  
Strongly stratified dynamos in spherical shells: a numerical study

## 1:00 – 2:20 Lunch

2:20 – 2:40 Nicolas Le Provost (Sheffield)  
Stellar dynamo: no need for rotation?

2:40 – 3:00 Laurene Jouve, Mike Proctor, Geoffroy Lesur (Cambridge)  
Buoyancy-induced time delays in Babcock-Leighton flux-transport dynamo models

3:00 – 3:20 Tina Davies, David Hughes (Leeds)  
Dynamo action driven by magnetic buoyancy

3:20 – 3:40 Krzysztof Mizerski, David Hughes (Leeds)  
Compressible Ekman-Hartmann boundary layers

## 3:40 – 4:20 Coffee Break

4:20 – 4:40 Jamie Douglas, Eun-jin Kim (Sheffield)  
Simulations of resistive tearing modes

4:40 – 5:00 Joanne Mason, Stanislav Boldyrev, Fausto Cattaneo (Chicago)  
Dynamic alignment in driven MHD turbulence

5:00 – 5:20 Fred Gent (Newcastle)  
Supernovae-driven turbulence in the ISM

5:20 – 5:40 Graeme Sarson (Newcastle)  
Deciphering solar turbulence from sunspots records

## 7:00 – 10:00 Dinner

# Friday May 21

- 9:20 – 9:40** Anthony Yeates, Gunnar Hornig, A. Wilmot-Smith, D. Pontin (Dundee)  
The topology of magnetic braids
- 9:40 – 10:00** Gunnar Hornig (Dundee)  
Turbulent magnetic reconnection: Estimation of reconnected flux
- 10:00 – 10:20** Jorge Fuentes-Fernandez, Clare Parnell, Alan Hood (St Andrews)  
MHD dynamical relaxation of 2D magnetic X-points
- 10:20 – 10:40** Andrew Haynes, Clare Parnell (St Andrews)  
Separators and separator reconnection
- 10:40 – 11:00** Jingnan Guo (Glasgow)  
Is the 3-D magnetic null point with a convective electric field an efficient particle accelerator?
- 11:00 – 11:40** Coffee Break
- 11:40 – 12:00** Khalil Al-Ghafri, R.J. Morton, R. Erdelyi (Sheffield)  
Damping of magneto-acoustic oscillations in hot and dynamic coronal plasma
- 12:00 – 12:20** Rekha Jain (Sheffield)  
Axisymmetric absorption and scattering of p modes by thin magnetic flux tubes
- 12:20 – 12:40** Nicky Chorley (Warwick)  
Persistency of long period oscillations in sunspots
- 12:40 – 1:00** Gert Botha, Tony Arber, Valery Nakariakov (Warwick)  
Chromospheric resonances above sunspots
- 1:00 – 2:20** Lunch
- 2:20 – 2:40** Kuan Tam, Alan Hood (St Andrews)  
Coronal heating by Taylor relaxation
- 2:40 – 3:00** Anvar Shukurov (Newcastle)  
Turbulent magnetic fields and cosmic rays in galactic spiral arms

All talks will be in the School of Earth & Environment seminar room.

Lunches and coffee breaks will be in the School of Mathematics.

Dinner will be in the Woodhouse Room in University House.