

# Programme

## 13<sup>th</sup> MHD-DAYS 2010 Forschungszentrum Dresden Rossendorf

Monday, November, 22

11:00-13:00	<b>Registration &amp; Lunch</b>	
13:00-13:10	Welcome (F. Stefani)	
13:10-13:25	Introduction (R. Sauerbrey)	
<b>13:30-15:15 First session</b>		
13:30-13:45	K.-H. Rädler	Mean-field diffusivities in passive scalar and magnetic field transport in turbulent potential flows
13:45-14:00	M. Schrunner	Oscillatory dynamo models and implications for the solar dynamo
14:00-14:15	M. Küker	Internal rotation, meridional flow, and magnetic activity of Arcturus
14:15-14:30	K. Finke	Dynamo threshold of spherical Couette flows with and without global rotation
14:30-14:45	A. Hubbard	Magnetic helicity fluxes in an $\alpha^2$ -dynamo embedded in a halo
14:45-15:00	J. Léorat	Work in progress on precession driving of dynamo action
<b>15:00-16:00 Coffee break and Poster session</b>		
	A. Jackson	Inviscid treatment of the dynamics of Earth's core
	W. Dietrich	Lateral cmb heat flux variations as a model for Martian paleomagnetic field
	J. Ernst-Hullermann	Precession-driven dynamos
	V. Travníkov	Influence of an axial magnetic field on the stability of spherical Couette flows with different gap widths
	A. Giesecke	High permeability material and dynamo action
	G. Pulugundla	Numerical Investigation of Wall Bounded Liquid Metal Flow in the Presence of a Small Permanent Magnet
	S. Typfel	Kinematic Simulation of liquid duct flow in the presence of a magnetic dipole
	M. Gramß	Calibration of a Lorentz Force Flowmeter
	K. Timmel	The steady magnetic field impact on the mould flow in the continuous casting process of steel
	D. Buchenau	Force-free and contactless electromagnetic flow rate sensors
<b>16:00-18:00 Second session</b>		
16:00-16:15	F. Busse	Remarks on some typical assumptions made in dynamo theory
16:15-16:30	J.-F. Pinton	VKS dynamo and dynamics
16:30-16:45	J. Brestensky	Hydromagnetic instability in rotating planar layer determined by anisotropic diffusivities
16:45-17:00	A. Marsenić	Conditions for localization of convection to a magnetic shear layer
17:00-17:15	J. Wicht	Instabilities in the Spherical-Couette system
17:15-17:30	L. Petitdemange	Magnetostrophic MRI in planetary interiors
17:30-17:45	M. Gellert	Nonaxisymmetric standard MRI in MH Taylor-Couette flows
17:45-18:00	G. Gerbeth	The DRESHDYN project at FZD
18:15	<b>Departure for the hotel "Pappritzer Hof"</b>	
18:30	<b>Arrival &amp; check in at "Pappritzer Hof"</b>	
<b>19:30</b>	<b>Conference dinner (Pappritzer Hof)</b>	

# Tuesday, November, 23

8:30	<b>Departure at the "Pappritzer Hof"</b>	
<b>9:00-10:30</b>	<b>Third session</b>	
9:00-9:15	M. Mond	Transient Growth and Spectral Instabilities in Thin Keplerian Disks
9:15-9:30	M. Flaig	Magnetorotational Turbulence in Protoplanetary Discs
9:30-9:45	M. Stute	Launching jets from truncated accretion disks
09:45-10:00	T. Kondic	Shear-Hall Instability in Spherical Geometry
10:00-10:15	R. Arlt	Mean-field coefficients from the Tayler instability
10:15-10:45	<b>Coffee break</b>	
<b>10:45-11:45</b>	<b>Fourth session</b>	
10:45-11:00	W.-C. Müller	The inverse cascade of magnetic helicity
11:00-11:15	V. Tanriverdi	Power spectrum of the numerical geodynamo
11:15-11:30	J. Pratt	Lagrangian Statistics of 3D MHD and MHD Convection
11:30-11:45	A. Tilgner	Temporal fluctuations in dynamos with kolmogorovian turbulence
11:45-13:00	<b>Visit of the MHD experimental hall</b>	
13:00-14:00	<b>Lunch</b>	
<b>14:00-15:30</b>	<b>Fifth session</b>	
14:00-14:15	A. Thess	Marbles and Magnets
14:15-14:30	T. Boeck	DNS of transition and turbulence in wall-bounded MHD flows
14:30-14:45	S. Dong	Instability of streaks in channel flow with streamwise magnetic field
14:45-15:00	V. Minchenya	Control of the Liquid Metal Droplet in High Frequency Magnetic Field
15:00-15:15	S. Miralles	A novel magnetic probe for velocity measurements in conducting fluids
15:15-15:30	T. Wondrak	Examination of different flow regimes in the mold of a model of continuous casting using the contactless inductive flow tomography
15:30-16:00	<b>Coffee break</b>	
<b>16:00-17:00</b>	<b>Sixth session</b>	
16:00-16:15	Y. Kolesnikov	Pipe flow under Halbach MF for implementation in LFV
16:15-16:30	C. Heinicke	Local resolution of LFV in a liquid metal duct flow
16:30-16:45	M. Kirpo	Eddy current breaking of a translating conducting bar by a magnetic dipole
16:45-17:00	<b>Discussion &amp; Closing</b>	