



Program – 27.10.2008

Saturday, Nov. 1

17:00-20:00 Registration, Hotel lobby

Sunday, Nov. 2

17:00-20:00 Registration and poster mounting
 19:00 Welcome reception near Hotel lobby, offered by the Hotel

Monday, Nov. 3

9:00-9:30 Welcome/Introduction (J. Beckman/ K.G. Strassmeier)

Session 1: Interstellar magnetic fields, star-forming regions, and the death valley

Chair: Takahiro Kudoh (a.m.), Elisabete de Gouveia Dal Pino (p.m.)

9:30-10:00 Measuring ISM magnetic fields by radio polarization (R. Beck)
 10:00-10:30 Measuring ISM fields using pulsars (A. Noutsos)
 10:30-11:00 *Coffee*
 11:00-11:30 Orion: the structure of a magnetized HII region (G. Ferland)
 11:30-12:00 Role of magnetic fields in emerging paradigms of shaping and launching Planetary Nebulae (E. Blackman)
 12:00-12:15 Magnetic fields in AGB stars and (proto-) Planetary Nebulae (F. Herpin)
 12:15-12:30 The magnetic field structure in the multi-source magnetized core NGC 2024 FIR 5 (F. O. Alves)

Lunch

14:30-15:00 The role of magnetic fields in Supernovae (H. Spruit)
 15:00-15:15 Probing interstellar magnetic fields with Supernova remnants (R. Kothes)
 15:15-15:30 A galaxy dynamo by Supernova-driven interstellar turbulence (O. Gressel)
 15:30-16:00 *Coffee*

Session 2: Multi-scale magnetic fields of the Sun; their generation in the interior, and magnetic energy release

Chair: Nigel O. Weiss

16:00-16:30 Magnetic fields and dynamics in the Sun's interior (A. Kosovichev)
 16:30-17:00 Paradigm shifts of the solar dynamo (A. Brandenburg)
 17:00-17:30 Magnetic instabilities in stellar physics and in the laboratory (G. Rüdiger)
 17:30-17:45 On the relation between photospheric magnetic fields and chromospheric emissions in the quiet Sun (M. Loukitcheva)
 17:45-18:00 Impact of large-scale magnetic fields on stellar structure and evolution (V. Duez)



Tuesday, Nov. 4

- 9:00-9:30 Magnetic flux emergence and solar eruptions (F. Moreno-Insertis)
 9:30-10:00 Magnetic reconnections and energy release on the Sun and solar-like stars (L. van Driel-Gesztelyi)
 10:00-10:30 The second solar spectrum and the hidden magnetism (J. Stenflo)
 10:30-11:00 *Coffee*

Session 3: Planetary magnetic fields and the formation and evolution of planetary systems and planets: exoplanets

Chair: Karl-Heinz Glassmeier

- 11:00-11:30 The role of a magnetic fields for planetary formation (A. Johansen)
 11:30-12:00 Planetary dynamos: differences and similarities to stellar dynamos (P. H. Roberts)
 12:00-12:30 The Jupiter-Io system (Yi-Jiun Su)

Lunch

- 14:30-15:00 The role of intrinsic magnetic fields in the evolution and habitability of planets: planetary protection aspects (M. Khodachenko)
 15:00-15:15 The effect of stellar magnetic braking on the evolution of close-in extrasolar planets orbiting main-sequence stars (A. Barker)
 15:15-15:30 Feedback of the magnetic field of a close-in exoplanet to the star (U. Motschmann)
 15:30-16:00 *Coffee*
 16:00-18:00 **Poster talks I** (*see separate program*)

Wednesday, Nov. 5

Session 4: Stellar magnetic fields: cool and hot stars

Chair: Svetlana Hubrig

- 9:00-9:30 The basic role of magnetic fields in stellar evolution (A. Maeder)
 9:30-10:00 Observational evidence for magnetic fields across the H-R diagram (S. Berdyugina)
 10:00-10:15 Magnetic field observations of massive stars (G. Wade)
 10:15-10:30 Magnetic field observations of very-low-mass stars (A. Reiners)
 10:30-11:00 *Coffee*
 11:00-11:30 Measuring T-Tauri star magnetic fields (C. Johns-Krull)
 11:30-11:45 Magnetic coronae of active main-sequence stars (M. Jardine)
 11:45-12:00 Starspots – signatures of stellar magnetic activity (K. G. Strassmeier)
 12:00-12:30 Magnetic fields in White Dwarfs and direct progenitors (S. Jordan)

Lunch

15:00 Afternoon excursion



Thursday, Nov. 6

Session 5: From stars to galaxies and the intergalactic space

Chair: Dmitry Sokoloff (a.m.), Bryan Gaensler (p.m.)

- 9:00-9:30 Pulsars and magnetars (M. Kramer)
 9:30-10:00 The magnetic structure of our galaxy: a review (Jin-Lin Han)
 10:00-10:30 Galactic dynamo simulations (D. Elstner)
 10:30-11:00 *Coffee*
 11:00-11:15 Cosmic-ray driven dynamo in galactic disks (M. Hanasz)
 11:15-11:30 The magnetic field in luminous star-forming galaxies (T. Robishaw)
 11:30-12:00 Magnetic transport from AGN cores to the IGM: present and past (P. P. Kronberg)
 12:00-12:15 The magnetic field structure in NGC253 in presence of a galactic wind (V. Heesen)
 12:15-12:30 What do we really know about the magnetic field of the Milky Way? (R. Wielebinski)

Lunch

- 14:30-15:00 Magnetic fields in and beyond clusters of galaxies (K. Dolag)
 15:00-15:30 Constraining magnetic seed fields for clusters and galaxies (R. Durrer)
 15:30-16:00 *Coffee*
 16:00-16:30 Magnetic fields in the early Universe (E. Battaner)
 16:30-18:00 **Poster talks II** (*see separate program*)

20:00 Conference dinner

Friday, Nov. 7

Session 6: Advances in methods and instrumentation for measuring magnetic fields across all wavelengths and targets

Chair: Tom Landecker (a.m.), Klaus G. Strassmeier (p.m.)

- 9:00-9:30 Zeeman splitting (C. Heiles)
 9:30-10:00 The Faraday rotation technique (G. Heald)
 10:00-10:30 Measuring and calibrating galactic synchrotron emission (W. Reich)
 10:30-11:00 *Coffee*
 11:00-11:30 Imaging polarimetry: a powerful diagnostic tool (T. Gledhill)
 11:30-12:00 Diagnostic methods based on scattering polarization and the joint action of the Hanle and Zeeman effects (J. Trujillo-Bueno)
 12:00-12:30 Zeeman-Doppler Imaging: limitations and new approaches (T. A. Carroll)

Lunch

- 14:30-15:00 Cosmic magnetism with the Square Kilometre Array and its pathfinders (B. Gaensler)
 15:00-15:30 Measuring cosmic magnetic fields with very large telescopes (O. Kochukhov)
 15:30-17:00 **Panel discussion:** Conclusions and new ideas (*SOC panel*)

End of meeting