

# From simulations to observations of a magnetized galactic medium: knowledge and perspectives

Astronomical Observatory of the Jagiellonian University  
ul. Orla 171, 30-244 Kraków, POLAND

Wednesday, April 2<sup>nd</sup>

9.30 – 10.15 **Harald Lesch** – *Remarks on the radio-farinfrared correlations*

10.15 – 10.45 **Katarzyna Otmianowska-Mazur** – *Magnetic reconnection – numerical approach*

Coffebreak (15min)

11.00 – 11.45 **Michał Hanasz** – *Cosmic Ray driven dynamo*

11.45 – 12.15 **Andrew Fletcher** – *Using random fluctuations in radio maps to study magnetic fields*

12.15 Discussion (30min) – moderator: **Detlef Elstner**

13.00 Lunch

15.00 – 15.45 **Anvar Shukurov** – *Dynamically dominant magnetic fields in the warm ISM*

15.45 – 16.30 **Detlef Elstner** – *New insights into galactic dynamo*

Coffebreak (15min)

16.45 – 17.15 **Hanna Kotarba** – *SPH simulations of the galactic large-scale magnetic field*

17.15 – 17.45 **Marian Soida** – *Modeling magnetic fields in Virgo spirals*

17.45 Discussion (60min) – moderator: **Anvar Shukurov**

Thursday, April 3<sup>rd</sup>

9.30 – 10.15 **Marek Urbanik** – *Observations of galactic and intergalactic magnetism - successes and questions*

10.15 – 10.45 **Marek Weżgowiec** – *Magnetic and X-ray diagnostics of interactions of spiral galaxies in a cluster environment*

Coffebreak (15min)

11.00 – 11.30 **Krzysztof Chyży** – *Magnetic maps of nearby spirals*

11.30 – 12.00 **Marita Krause** – *Magnetic fields and star formation in spiral galaxies*

12.00 Discussion (30min) – moderator: **Matthias Ehle**

13.00 Lunch

15.00 – 15.45 **Ralf-Jürgen Dettmar** – *Physics of the interstellar disk-halo interface in spiral galaxies*

Coffebreak (15min)

16.00 – 16.30 **Volker Heesen** – *The cosmic rays distribution and structure of magnetic field in the nearby starburst galaxy NGC 253*

16.30 – 17.00 **Grażyna Siemieniec-Oziębło** – *Nonthermal phenomena in galaxy clusters as constraints of intracluster magnetic fields*

17.00 Discussion (60min) – moderator: **Ralf-Jürgen Dettmar**

18.00 – 18.30 **Katia Ferrière** – *Summary*