Geomagnetic Twin Satellites MSS-1: Progress and Future Plans

Final programme

10:30 Welcome

Mission overview and instrumentation

10:35 - 11:50 Overview of MSS-1 and MSS-2: Keke Zhang (MISTA, Macau)

10:50 - 11.05 MSS-1 Satellite System Design(In-flight calibration and validation of the Macao Scientific Satellite magnetic data): Shigeng Yuan (DFH, China) and Yi Jiang (MISTA, Macau)

11.05 - 11:20 **In-orbit testing/calibration of the scalar magnetometer:** Werner Magnes, (Austrian Academy of Sciences, Austria)

11:20 - 11:35 In-orbit testing/calibration of the vector magnetometer and star cameras: Peter Brauer (DTU, Denmark) and Troelz Denver (DTU, Denmark)

Initial Results of MSS-1

11:35 - 11:50 A CHAOS-like model with an empirical space current

system: Kuan Li (MISTA, Macau)

11:50 - 12:05 **Mantle conductivity and tide induced signals:** Zhengyong Ren (Central South University, China)

12:05 - 12:20 Ionospheric Irregularities and Scintillation at Equatorial and Low Latitudes: Zhe Yang(Tongji University, China)

12:20 - 12:35 Energetic electron dynamics in the radiation belt/SAA: Qiugang Zong (Peking University, China)

12:35 - 12:50 **Reconstruction of 3-D Core Flow:** Yufeng Lin (Southern University of Science and Technology, China)

12:50 - 14:00 lunch

Wider context: Swarm and future missions

14:00 - 14:15 **Synergies between Swarm and MSS-1: programmatics** Anja Stromme (ESA)

- 14:15 14:30 Synergies between Swarm and MSS-1: scientific opportunities Nils Olsen (DTU, Denmark)
- 14:30 14:45 **3-D** global mantle conductivity models derived from satellite measurements of geomagnetic field variations Jakub Velimsky (Charles University, Czech Republic)
- 14:45 15:00 **Waves in the core from satellite data :** Nicolas Gillet (ISTerre, France)
- 15:00 15:15 The core-mantle boundary magnetic field and opportunities with

MSS-1: Chris Finlay (DTU, Denmark)

15:15 - 15:35 Discussion about MSS-2

Dinner and reception

- 4:00 5:00 Museum opens at the Royal Institution for dinner guests
- 5:00 6:30 Drinks reception at the Royal Institution with scientific discussions
- 6:30 8:30 Dinner