

## Opening Plenary Session, 1 July 13:00 GMT

*Conveners: Giorgiana De Franceschi (INGV, IT), Nicolas Bergeot (ROB, BE)*

### Format

- Contributions: The SCAR expert group "GRAPE" (5 min), The Proposal Planning Group "RESOURCE" (5 min)
- Contributions on "upcoming polar campaigns": 1-2 minutes each (please 1-2 slides max)
- Early Career Researchers, Invited : 10 min presentation + 2 min questions

13:00-13:05- The SCAR expert group "GRAPE", G. De Franceschi, N. Bergeot

13:05-13:10 - The Proposal Planning Group "RESOURCE", L. Alfonsi et al

13:10-13:25

- Upcoming polar campaigns at SANAE-IV, S. Lotz (1 slide)
- State of the art of Argentinean related projects, A. Gulisano (1 slide)
- Ny-Alesund, MZS, Concordia: state of the art of Italian GRAPE related Projects, C. Cesaroni (1 slide)
- Brazilian GRAPE activities in Antarctica and South America, E. Correia (1 slide)
- Upcoming Antarctica campaign, N. Bergeot (1 slide)
- ELF-VLF campaign in Northern Finland, E.L. Macotela (2 slides)
- Activities at the Norwegian research station Troll in Queen Maud Land, Antarctica, Wojciech Miloch (2 slides)
- GNSS and Meteorology Stations Horseshoe Island (Antarctica), Oğuz Selbesuglu (2 slides)

13:30-13:42 - Quiet time TIDs observed over Antarctica, T. Atilaw (ECR)-**invited** (10 min+2 min for questions)

13:43-13:55 - Response of the winter polar ionosphere to CME and CIR driven storms, Shreedevi P R (ECR), **invited** (10 min+2 min for questions)

13:56-14:08 - The SWIT-eSWua system: a cutting-edge infrastructure to access ionospheric data in polar areas, E. Pica (ECR), **invited** (10 min+2 min for questions)

14:15- End of the Opening Plenary Session

## Session 1, 2 July 13:00 GMT

**Short and long-term variations of the neutral atmosphere (including Water Vapour, AGWs, airglow, mesosphere, thermosphere, low-high latitude connections)**

*Conveners: José Valentin Bageston (INPE, BR) & Monia Negusini (INAF, IT)*

### Format

Invited : 12 min presentation + 3 min questions

Contributions: 8 min presentation + 2 min questions

## **Mesosphere/ Thermosphere & Ionosphere**

13:00 -13:12 ANGWIN: ANtarctic Gravity Wave Instrument Network – Moffat-Griffin et al. **Invited**

13:15 - 13:23 - Mesospheric instrumentation and observations at Comandante Ferraz Brazilian Antarctic Station – Bageston et al.

13:25: 13:33 Planetary waves and tides observed in meteor winds over Ferraz station, Antarctica – Lima et al.

13:35 – 13:43 Sporadic perturbations in the high latitude D-region ionosphere – Macotela et al.

13:45 – 13:53 Thermospheric parameters from Ionosonde observations from climate change to the space weather applications – Perrone et al.

## **Troposphere**

13:55 – 14:07 GNSS derived water vapour observations at high latitudes – Pottiaux et al. **Invited**

14:10 – 14:08 How atmospheric conditions affect the cosmic ray observations from the Marambio LAGO site – Santos et al.

14:20 – 14:28 Role of Indian Ocean subtropical high in generating Austral winter Antarctic precipitation – Sundaram

14:30 – 15:00 Closing discussion

## **Session 2, 2 July 13:00 GMT**

### **Short and long-term variations of the ionosphere and plasmasphere (including multi-instruments and modelling)**

*Conveners: Nicolas Bergeot (ROB, BE) & Emilia Correia(INPE,BR)*

## **Format**

Invited : 10 min presentation + 2 min questions

Contributions: 8 min presentation + 2 min questions

## **Plasmasphere**

13:00-13:10 Small and large scale structure of the plasmasphere – Lichtenberger et al. - **Invited**

13:12-13:20 Plasmaspheric studies with ground-based instruments (VLF antenna in Antarctica), satellite data (Cluster mission) and a 3D empirical model – Darrouzet et al.

13:22-13:30 Influence of the planetary magnetic field on the ion escape from terrestrial planets – Maggiolo

13:32-13:40 Investigation of Joule heating at higher latitudes – Antarctica – C.P. Anil Kumar et al.

## **Ionosphere**

13:42-13:50 Early studies of high latitudes ionospheric stations in the south and new approaches – Gulisano et al. – **Invited**

13:52-14:00 Density and Temperature Comparison of Ions at Ionosphere F-2 Region for Day and Night of solar minimum year – Mangla

14:02-14:10 Possible effects of solar wind transient modulation of Galactic Cosmic Rays on high latitude atmosphere – Gutiérrez et al.

14:12-14:20 Polar electron content features shown in UQRG GIMs and climatology study by Learning Vector Quantization – Lyu et al.

14:22-15:00 Closing discussion

### **Session 3, 2 July 13:00 GMT**

#### **Space weather impact on radio measurements at high latitudes (including multi-instrument data analysis)**

*Conveners: Pierre Cilliers (SANSA, ZA) & Luca Spogli (INGV, IT)*

#### **Format**

Invited: 10 min presentation + 2 min questions

Contributions: 8 min presentation + 2 min questions

13:00-13:10 GPS TEC and phase variations during auroral substorms – P. Prikryl – **Invited**

13:12-13:22 URSI Space Weather Group activities – I. Stanislawska – **Invited**

13:24-13:34 Ground based and in-situ studies of the polar ionosphere – W. J. Miloch – **Invited**

13:36-13:46 Does the scintillation spectra tell us anything about the medium? – P. T. Jayachandran – **Invited**

13:46-13:54 Application of the GNSS observations for investigation of the Space Weather driven ionospheric plasma irregularities – I. Cherniak

13:56-14:04 Space Weather Observations at SANA-IV – S. Lotz

14:06-14:14 The influence of space weather on the behavior of the ionosphere in the Antarctic region – O. Maltseva

14:16- 14:24 Operative Space Weather products offered by LAMP – V. Lanabere

14:26-15:00 Closing discussion

**Closing Plenary Session, 3 July 13:00 GMT**

**Chairs: Giordiana De Franceschi(INGV, IT) & Lucilla Alfonsi (INGV, IT)**

Conveners of the 3 sessions will report the session outcome (15 minutes each plus 5 min for questions/comments/feedback), taking care of identifying the leader(s) coordinating the efforts on the common studies planned as well as contributors.

13:00-13:15 J. V. Bageston (INPE, BR), M. Negusini (INAF, IT)

13:20-13:35 N. Bergeot (ROB, BE), E. Correia (INPE, BR)

13:40-13:55 P. Cilliers (SANSa, ZA), L. Spogli (INGV, IT)

14:00-14:15 Wrap-up and workshop closing