

International School of Space Science (<http://www.cifs-iss.org/>)

**Radiation Belt Dynamics and Remote Sensing of the Earth's Plasmasphere**

26-30 September 2022

PROGRAM

**Sunday, 25 September**

20:00 Welcome dinner

**Monday, 26 September**

08:15-09:30 Registration  
09:30-09:45 Welcome (**ISSS Director**) and School Introduction (**Course Directors**)  
09:45-10:30 The Radiation Belt Revolution I (**G. Reeves**)  
10:30-11:00 Coffee Break and Poster viewing  
11:00-11:45 The Radiation Belt Revolution II (**G. Reeves**)  
11:45-12:30 An overview of plasmasphere dynamics I (**J. Krall**)  
12:30-14:15 Lunch  
14:15-15:00 An overview of plasmasphere dynamics II (**J. Krall**)  
15:00-15:45 Solar wind driving of radiation belt dynamics I (**E. Kilpua**)  
15:45-16:15 Coffee Break and Poster viewing  
16:15-17:00 Solar wind driving of radiation belt dynamics II (**E. Kilpua**)  
19:30 Dinner

**Tuesday, 27 September**

09:00-10:30 Remote sensing of the plasmasphere by VLF whistlers (**J. Lichtenberger**)  
10:30-11:00 Coffee Break and Poster viewing  
11:00-12:30 Acceleration of radiation belt electrons by VLF Chorus and magnetosonic waves (**R. Horne**)  
12:30-14:15 Lunch  
14:15-15:45 Whistlers detection by neural networks (**V. Harid**)  
15:45-16:05 Coffee Break and Poster viewing  
16:05-17:35 The role of EMIC waves in the inner magnetosphere dynamics (**M. Usanova**)  
17:35-18:30 Interrelationship between laboratory and plasmasphere evidence of radiation-belt dynamical processes: Scaling necessities, unique physics insight, and constraints of experimental realities (**M. Koepke**)  
19:30 Dinner

### **Wednesday, 28 September**

- 09:00-10:30 Interaction of radiation belt energetic particles with VLF hiss (**J.-F. Ripoll**)
- 10:30-11:00 Coffee Break and Poster viewing
- 11:00-12:30 Numerical modeling of radiation belt dynamics (**A. Drozdov**)
- 12:30-14:15 Lunch
- 15:00-19:00 Social event (**TBD**)
- 20:00 Dinner

### **Thursday, 29 September**

- 09:00-10:30 Electron precipitation from the radiation belts into the atmosphere (**C. Rodger**)
- 10:30-11:00 Coffee Break and Poster viewing
- 11:00-12:30 The role of plasmaspheric dynamics in electron precipitation occurrence (**M. A. Clilverd**)
- 12:30-14:15 Lunch
- 14:15-15:45 Remote sensing of the plasmasphere by ground-based observations of geomagnetic field line resonances (**M. Vellante**)
- 15:45-16:05 Coffee Break and Poster viewing
- 16:05-17:35 Monitoring the plasmasphere by spacecraft observations of toroidal mode standing Alfvén waves (**K. Takahashi**)
- 17:35-18:30 Poster viewing
- 19:30 Dinner

### **Friday, 30 September**

- 09:00-10:30 Remote sensing the plasmopause by means of monitoring conjugated ionospheric phenomena (**B. Heilig**)
- 10:30-11:00 Coffee Break and Poster viewing
- 11:00-12:30 Modeling the Plasmasphere Dynamics with Data Assimilation (**A. Jorgensen**)
- 12:30-12:45 Concluding remarks
- 12:45-14:15 Lunch