

**"Specification of ionization sources  
affecting atmospheric processes"**

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**Monday 31.03.2014:**

- 9:30 – **Maurizio Falanga**  
Opening Workshop and Introduction to the ISSI
- 10:00 – **Irina Mironova**  
Introduction: Goals of our ISSI project
- 10:15 – **Coffee break**
- 10:30 – **Anton Artamonov**  
A new complex ionization model of the entire Earth atmosphere
- 11:00 – **Olesya Yakovchouk**  
Modeling magnetospheric particle ionization based on magnetospheric disturbance
- 11:30 – **Irina Mironova**  
Role of extreme EPP events into the polar stratosphere
- 12:00 – **Lunch**
- 14:00 – **Frank Arnold**  
Atmospheric ions and aerosol formation-New insights
- 14:30 – **Ilya Usoskin**  
Solved and outstanding problems in cosmic ray induced ionization.
- 15:00 – **Coffee break**
- 15:30 – **Miriam Sinnhuber**  
Observation of the impact of atmospheric ionization events (with a focus on precipitating electrons) on neutral constituents in the middle atmosphere
- 16:00 – **Discussion**
- 17:00 – **Ice Breaker party organized by the ISSI ?**  
or coming together somewhere

**Tuesday 1.04.2014**

- 9:30 – **Karen Aplin**  
Development and laboratory testing of a solid state detector for atmospheric ionisation measurements
- 10:00 – **Keri Nicoll**  
Ionisation effects on atmospheric processes

- 10:30 - **Giles Harrison**  
Radiosonde instruments for ionisation measurements
- 11:00 – Coffee break
- 11:30 - **Maik Wissing**  
Modeling the electron impact on ionization rates - and why we shouldn't trust them
- 12:00 – **Miriam Sinnhuber**  
Modeling of atmospheric ionization impacts: from one-dimensional ion chemistry models to three-dimensional global models of atmospheric chemistry and transport
- 12:30 – Lunch
- 14:30 – **Galina Bazilevskaya**  
Precipitating electron events in the Earth's atmosphere as observed in the Russian long- term cosmic ray balloon experiment
- 15:00 – **Vladimir Makhmutov**  
Space, time and energy characteristics of the precipitating electron transport in the Earth's atmosphere
- 15:30 - Coffee break
- 15:30 – **Bernd Funke**  
MIPAS data and how they can be used to constrain atmospheric EPP effects
- 16:00 – **Eugene Rozanov (cancel)**  
The treatment of the energetic particles in climate-chemistry models
- 16:30 - Discussion

During discussion we will organize sub-groups to work in,

- "A" in balloon ionisation,
- "B" in precipitation electrons,
- "C" in ionisation models and in parameterisation of ionisation.

A leader in each case needs to be identified.

### Wednesday 2.04.2014

Sub-group work all day, groups in parallel - settle on aims and ways to proceed

Working time from 9:30 till 17:00, 2-4 Coffee breaks and one lunch break from 13:00 till 14:00

### Thursday 3.04.2014

Summaries first thoughts of the different working groups

All of us to bring together these ideas, make plans for the Team and for the next workshop

Working time from 9:30 till 17:00, 2-4 Coffee breaks and one lunch break from 13:00 till 14:00

### Friday 4.04.2014

Short further discussions and departure

Working time from 9:30 till 13:00, 1-2 Coffee breaks

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