

Annual Meeting of SRS (Svenska Rymdforskarens Samarbetsgrupp), Uppsala, 11-12 March 2014

The SRS Meeting 2014 was held on 11-12 March 2014 at the Ångström Laboratory in Uppsala. The local host was the Swedish Institute of Space Physics, IRF. The meeting celebrated 50 years since SRS first met, also in Uppsala, in 1964.

On the evening of Tuesday 11 March the meeting participants were welcomed to a jubilee dinner (courtesy of the Swedish National Space Board, SNSB) at the Uppsala Castle by Peter Egardt, County Governor of Uppsala (and chairman of the board of SNSB).

The meeting began at 13:00 on Tuesday 11 March and concluded at 16:30 on Wednesday 12 March. There were 86 registered participants: <http://www.irf.se/srs2014/>

The meeting was chaired by SRS chairperson Donal Murtagh (Chalmers). Meeting secretary was Rick McGregor (IRF Kiruna).

Meeting programme: http://www.irf.se/link/srs2014_program

In addition to the oral presentations summarised below, 18 posters were displayed outside the meeting room; participants had the opportunity to discuss them with their authors during the coffee breaks on both days.

Tuesday 11 March 2014

1. Opening of the meeting

SRS chair Donal Murtagh opened the meeting.

Mats André (IRF Uppsala) welcomed the participants on behalf of the local host organisation. Peter Egardt (Chairman of the board, SNSB, and County Governor of Uppsala) welcomed the participants to Uppsala and summarised space activities in 1964 and until today.

2. First topical session: Sun-Earth System (Chair: Donal Murtagh, Chalmers)

Herman Opgenoorth (IRF Uppsala) gave an introduction to the ESA's Swarm mission. Yuri Khotyaintsev (IRF Uppsala) described the EU FP7 project MAARBLE and its wave database for the Earth's radiation belts.

3. Second topical session: Astronomy (Chair: Alexis Brandeker, SU)

David Hobbs (Lund University) reported on the current status of, and data releases from, the Gaia mission. Göran Olofsson (Stockholm University) gave a short history of space telescopes and described plans for SPICA, possibly the next cooled space telescope.

4. Third topical session: Past and Future (Chair: Donal Murtagh, Chalmers)

Christer Fuglesang (KTNH/SNSB/ESA) described the steps that have been taken in the project Swedish Space Research 4%, which has the aim of increasing Sweden's return from EU's Horizon 2020. Lennart Nordh (ex-SNSB and emeritus, Stockholm University) gave some background history of Swedish space groupings in his talk SRS - some reflections. Kristine Dannenberg (SNSB) advertised the German-Swedish (in cooperation with ESA) programme for student experiments on balloons and sounding rockets from Esrange in her talk on Getting involved in real space projects, which gave an account of the background, participation and opportunities for Swedish students to take part in the student programme REXUS/BEXUS.

5. Fourth topical session: Atmospheric Physics (Chair: Linda Megner, SU)

Patrick Eriksson (Chalmers) gave an account of sub-mm cloud-ice sounding and described a number of the available instruments and tools. Susanne Benze (Stockholm University) talked about combining American and Swedish satellite observations to learn more about noctilucent clouds (NLCs).

Wednesday 12 March 2014

6. Fifth topical session: Microgravity and Life Sciences (Chair: Lars Gustafsson, Karolinska institutet)

Anders Eklund (Umeå University) described the work of the Umeå Hydrocephalous Research Group and others on the gravitational influence on intracranial pressure for understand spaceflight-induced vision alterations. Dag Linnarsson (Karolinska institutet) reported the results of a study demonstrating that artificial gravity improves blood-pressure control after simulated microgravity, for example HDTBR (head down tilt bed rest).

7. Sixth topical session: Earth Observation (Chair: Lars Eklund, LU)

Yifang Ban (KTH) talked about using spaceborne SAR data for global urban mapping, research done as part of the Urbanization and Climate Project within the ESA-MOST Dragon 3 Cooperation Programme. Susanne Kratzer (Stockholm University) reported on the inherent optical properties of the NW Baltic Sea in comparison to other seas and oceans.

8. Seventh topical session: Astrobiology (Chair: Donal Murtagh, Chalmers)

Erik Vigren (IRF Uppsala) reported on his research on the ionization balance in the upper atmosphere of Saturn's moon Titan. Eva Wirström (Chalmers) talked about observing water in outer space using space-based observatories such as Herschel.

9. SRS business

Chairperson Donal Murtagh (Chalmers) opened the formal part of the meeting at 12:00 on Wednesday 12 March 2014.

The nominations committee (*valberedning*) elected at the 2013 SRS meeting in Kiruna (Victoria Barabash (LTU), Jacek Stegman (SU) and René Liseau (Chalmers)) had nominated a new Chair and two new members on the *Beredningsgrupp* (Working Group). The meeting approved their suggestions:

- Kay Justtanont (OSO, Chalmers) replaces Donal Murtagh (Chalmers) and was elected as Chair for a period of three years.

The following were elected last year for two years (and can be re-elected next year for two more years):

- Alexis Brandeker (SU-Astronomy), Astrophysics, Astronomy;
- Linda Megner (SU-MISU), Atmospheric Physics

The following were re-elected for two more years (after which they are to be replaced):

- Nickolay Ivchenko (KTH-Space & Plasma Physics), Space Plasma;
- Hans Nilsson (IRF-Kiruna), Space Physics;
- Lars Gustafsson (KI), Microgravity;
- Wolf Dietrich Geppert (SU-Physics), Astrobiology.

The following were elected for a period of two years (with a possible extension of two more years):

- Lars Ulander (FOI), who replaces Lars Eklund (LU-Earth and Ecosystem Sciences), Remote sensing;

- Gabriella Stenberg Wieser (IRF-Kiruna), who replaces Kay Justtanont (OSO, Chalmers), Solar System.

The meeting re-elected the nominations committee (*valberedning*) of Victoria Barabash (LTU), Jacek Stegman (SU) and René Liseau (Chalmers) to propose any replacement members on the Working Group (*beredningsgrupp*) six weeks prior to the next SRS meeting, if necessary. Otherwise no new nominations should be required in 2015.

The next meeting will be held in Gothenburg on Wednesday 11 March and Thursday 12 March 2015 following Rymdforum which will also be held in Gothenburg.

The meeting closed at 12:30.

10. Eighth topical session: Solar System (Chair: Gabriella Stenberg Wieser/Björn Davidsson)

Björn Davidsson (Uppsala University) reported on combining observations from ESA's Rosetta spacecraft with numerical models to explore the nucleus and coma of the Rosetta mission's target comet, 67P/Churyumov-Gerasimenko. Gabriella Stenberg Wieser (IRF Kiruna) described how one explores a comet with plasma instruments, also focusing on the Rosetta mission.

11. SNSB Session

Olle Norberg reported on the Swedish National Space Board's role and contacts with ESA and EU. Karin Holmquist described ESA's Earth Observation programmes, Kristine Dannenberg described ESA's ELIPS and ExoMars programmes, Johan Köhler described ESA's Science programme and Per Magnusson described the National Research Programmes and the SNSB open call which closes on 14 May. Johan Köhler reported the latest news from SNSB's initiative for a low-cost satellite mission, and Thorwald Larsson reported on EU's Horizon 2020 programme.

10. Closing of the meeting

The meeting chairman thanked the speakers and the local organisers (IRF Uppsala).

Minutes by

Rick McGregor (IRF Kiruna)