

**International Academy of Astronautics**  
6, rue Galilée, 75116 Paris  
<http://www.iaaweb.org>

**Commission 1 Space Physical Sciences**

**Minutes of Meeting**

**29 September 2018 – 13h00-15h45**  
**Bremen**

**Attendance:** S. McKenna-Lawlor (Ireland, chair), T. Spohn (Germany, secretary), R. McNutt (USA), A. Coustenis (France)

Excused: R. Lopez (USA, vice chair), N. Smirnov (Russia, past chair), G. Schwehm (Germany), S. Ulamec (Germany), W. Baumjohann (Austria)

**1. Welcome** Commission Chair S. McKenna-Lawlor

**2. Adoption of the Agenda** Commission Chair S. McKenna-Lawlor

The agenda was unanimously adopted after agenda point 6 Report from the IAA Permanent Committees had been removed due to the lack of members from these committees attending.

**3. Adoption of the Minutes of Commission 1, Paris March 2018**

T. Spohn briefly presented the minutes of the Paris 26 March meeting. The minutes were unanimously adopted.

**4. IAA Cosmic Studies**

*4.1 Current Studies*

- SG 1.6 Protected Antipode Circle Farside Protection  
Chair: Maccone Claudio

The study was reported to be finalized by the IAA office. Commission 1 members have not been able to see it, yet. The chair was asked to report to the SAC.

- SG 1.9 Satellite remote sensing of aerosols in the Earth atmosphere  
Chair: Yatskiv Yaroslav

The committee appreciates the work that was done by the study group. However, the commission notes that the work is focused on the Ukraine and lacks a description of the work international groups. The commission encourages the study group to review the international

state of the art of aerosol science and to describe how this gave input to their work including the design of the instrument and mission. The commission further encourages the study group to present a final report in due time

- SG 1.11 Comparative Climatology - Studying Planetary Climate to Understand our Planet  
Chairs: Ocampo Adriana, Ramachandran Radhika

The commission took note of the brief update report by the study group. The commission asks the study group – given the amount of time since the study was initiated – to provide a plan for the finalization of the study and the compilation of a final report. The commission looks forward to a detailed update by the upcoming spring meeting.

- SG 1.13 Small Satellites for Extremely Low Cost Planetary Mission  
Chairs: Baker John, Vane Gregg

The officers of commission 1 still have not seen the final report although it was reportedly (by the IAA office) sent to commission 1 members for review. No such review is known to the commission officers. The chair is asked to approach the IAA office and ask for the final report to be sent to commission 1 officers.

- SG 1.14 Integrated Precursor Distinguish in Multi-Geophysical Fields around Global Earthquake Events with Magnitude larger than 7 in Recent 10 Years  
Chairs: Bao Weimin, Contant Jean-Michel, Kuznetsov Vladimir

The commission took note that a Chinese version of the final report was written and that an English version would be provided by the end of the year 2018. The commission looks forward to receiving that report.

- SG 1.15 International Cooperation on Space Weather  
Chair: McKenna-Lawlor Susan

The commission appreciated the report and the detailed presentation given by the study lead. The presentation will also be made during Academy Day. The study group should be complemented with members with expertise in economics and the social sciences. Commission 6 will be approached on the issue.

- SG 1.16 Expanding Options for Implementing Planetary Protection during Human Space Exploration  
Chairs: Conley Catharine, Race Margaret

The commission took note of the suggestion by the study group lead to restart the group after significant international changes in the field have occurred. The commission encourages a proposal for a refocusing of the objections of the study group.

#### *4.2 New Studies Proposals*

The commission took note of the formal proposal made by Prof. G. Schwehm for a study group on “Implications of the Participation of Private and Commercial Entities in the Exploration of Space” and forwarded the proposal to the secretary general.

### **5. IAA Conferences**

The commission received the report by the chair on the following currently planned IAA Conferences

1. IAA Search for Life Signatures,  
Location, Date TBD  
Program Committee Chair or representative: Claudio Maccone / Michael Garrett
2. IAA Symposium on the Future of Space Exploration  
Location, Date: Torino, Italy - 2019  
Program Committee Chair or representative: Giancarlo Genta

### 3. IAA Symposia at IAC

IAA Symposium on the Search for extraterrestrial intelligence (SETI) Bremen, Germany (IAC A4), Program Committee Chair or representative: Claudio Maccone; Rapporteurs: Andrew Siemion, Paul Davies

The following *New Conferences proposal* was received and supported by the commission

1. The 6<sup>th</sup> Space Flight Safety Symposium to be held in St. Petersburg in 2019 Organizer: Prof. N. Smirnov

### 6. REPORT FROM THE IAA PERMANENT COMMITTEES

Deleted from the agenda

### 7. IAA HEADS OF SPACE AGENCIES SUMMIT

The commission appointed its chair S. McKenna-Lawlor to act as rapporteur at this summit.

S. McKenna-Lawlor (Human Spaceflight), G. Schwehm (Robotics) and N. Smirnov (Atmosphere) were proposed by the commission in response to a general invitation by Dr. Contant to help the Permanent Committee to prepare recommendations under the above suggested headings.

### 8. OTHER BUSINESS

The commission discussed the status of the proposal for three new members (David Spencer, Wu Ji, and Lembit Sihver). It was noted that D. Spencer was already member of Commission 3.

S. McKenna-Lawlor  
Chair

T. Spohn  
Secretary