## **International Academy of Astronautics**

6, rue Galilée, 75116 Paris http://www.iaaweb.org

# **Commission 1 Space Physical Sciences**

# Minutes of Meeting

## 26 March 2018 – 13h30-16h00 6, rue Galilée, 75116 Paris

Attendance: S. McKenna-Lawlor (Ireland, chair), N. Smirnow (Russia, past chair), T. Spohn (Germany, secretary), C. Maccone (Italy), R. McNutt (USA), G. Schwehm (Germany), A. Viviani (Italy), L. Zeleny (Russia)

Excused: R. Lopez (USA, vice chair)

1. Welcome

Commission Chair S. McKenna-Lawlor

2. Adoption of the Agenda

Commission Chair S. McKenna-Lawlor

The agenda was unanimously adopted

### 3. Adoption of the Minutes of Commission 1, Adelaide, 23 September 2017

N. Smirnov discussed the minutes of the Adelaide meeting in detail. A discussion with all the members followed. The minutes were finally unanimously accepted.

### 4. IAA Cosmic Studies

4.1 Current Studies

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

The study is finalized. Report is being forwarded to the Board of Trustees for approval before being published.

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

No report was available from this team. In Adelaide it was recommended that the Academy would write to this Team requesting them (1) to send a detailed report of their activities to Commission 1 and (2) to integrate their research into ongoing world studies. The chair was asked to check whether or not a report was published in AA.

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

At Adelaide, Commission 1 reported that it is not convinced that this study is a valuable piece of science. The Team should send a more detailed report including plans and schedule for future research and the expected results. A one-page written report was received in advance of the Paris meeting. The commission will ask the team for a more detailed report

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

The final report is under peer review at the Academy but the commission members said that they would like to see the report which they have hitherto not.

- 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

A presentation was made at Adelaide by X Zhang and Li Wang. Commission I asked these presenters to provide a draft version of their report for assessment rather than a copy of their power point presentation. A two-page written report was submitted before the Paris meeting. A more extensive report is expected to be available by the end of 2018.

- SG 1.15 International Cooperation on Space Weather

Chair: McKenna-Lawlor Susan

At Adelaide it was noted by Commission 1 that the group leader needs help from the Academy to find people from industry to be involved in this group (which now has 7 scientists from 5 different countries involved). In an oral report to Commission 1 the study group leader noted that no participants from industry had as yet been suggested.

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

Chairs: Conley Catharine, Race Margaret A draft 3 page report was received at Adelaide but no update for the Paris meeting.

### 4.2 New Studies Proposals

Two new proposals were received and are supported by the commission:

- 1. Where should the Moon Village be located? (Proposer C. Maconne)
- 2. Legal challenges in private space exploration (Proposer G. Schwehm)

## 5. IAA Conferences

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

- IAA Search for Life Signatures, Location, Date TBD Program Committee Chair or representative: Claudio Maccone / Michael Garrett
- 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 The following *New Conferences proposal* was received and supported by the commission

1. The 5<sup>th</sup> Space Flight Safety Symposium to be held in St. Petersburg (24-27 September 2018) Organizer: Prof. N. Smirnov

#### 6. REPORT FROM THE IAA PERMANENT COMMITTEES

The commission received a report from the IAA Permanent Committee on the Search for Extraterrestrial Intelligence (SETI) Chair: Claudio Maccone, Co-Chair: Michael Garrett, Leonid Gurvits, Secretary: Andrew Siemion.

The written report was circulated to commission members.

#### 7. IAA HEADS OF SPACE AGENCIES SUMMIT

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

#### 8. OTHER BUSINESS

One candidate for new member of the commission was proposed and supported by the commission: Wu Ji (China). (David Spencer was also proposed but he is already a Commission 3 member).

The draft agenda for the Academy day was discussed and approved

S. McKenna-Lawlor Chair T. Spohn Secretary