

Minutes from Commission 1 meeting, IAA, Paris, 21 March 2016

Susan McKenna-Lawlor, Vice-Chair, Chairing

Present: Rosaly Lopes (Secretary), Athena Cousens, Christophe Sotin, Claudio Maccone, Ralph McNutt, Gerhard Schwehm, Gregg Vane

1. Welcome

Susan McKenna-Lawlor welcomed attendees, passed on the regrets of Nickolay Smirnov, Chair of Commission 1, who could not be there. Members present (listed above) introduced themselves.

2. Adoption of agenda:

The agenda was adopted unanimously

3. Adoption of the Minutes of Commission 1, Jerusalem, October 10, 2015.

The minutes were adopted unanimously

4. IAA Cosmic Studies reports

Study Group 1.5 (Susan McKenna-Lawlor)

Particle Radiation Hazards en route to and at Mars.

Study Group 1.6 (Claudio Maccone reporting)

Protected Antipode Circle on Lunar Far side. Claudio Maccone reported. New choice of base, now a crater (name?) 80-km across shielded from radiation. Study was presented at COPUS 2010. ESA now wants to establish lunar base on farside for radio astronomy studies, Ulla Buhlmann from ESA is leading. Claudio Maccone proposed to start new study "Exploiting the Noiseless Far-Side of the Moon, involving companies. It was decided by those present that the old study should be closed, Claudio reported that the draft report is ready, now expecting final report.

Study Group 1.8

Global Satellite System for Monitoring and forecasting of the Earth seismic activity

Susan McKenna-Lawlor reported that she had received a response, the report has been refereed and study leads have responded to referee comments. Final report expected soon.

Study Group 1.9

Satellite Remote Sensing of Aerosols in the Earth atmosphere

Susan McKenna-Lawlor reported that she received a report, but in the form of a presentation, with little detail. She will send a letter to the study lead asking for a more complete draft to be provided in time for meeting in Guadalajara.

Study Group 1.10

Terrestrial Analogue – Comparison of Terrestrial & Planetary Geology

Susan McKenna-Lawlor received email from M. Coradini saying that the report would be ready soon.

Study Group 1.11

Comparative Climatology – Studying Planetary Climate to Understand our Planet

No progress report received. Gregg Vane, who is not associated with the study, reported that this study helped to kick-start a NASA biannual symposium on comparative planetary climate. Athena Coustenis reported that she is writing a chapter for a book on the subject. The consensus of those present was that the need for this study has been superseded by these events and the recommendation was for the study to be cancelled.

Study Group 1.12

Virtual Reality – Virtual Exploration of Planets

Susan McKenna-Lawlor received email from M. Coradini saying that the report would be ready soon.

Study Group 1.13

Planetary Science Enabled by the New Generation of Cube-Sats and Miniaturized Scientific Instruments

Gregg Vane reported that the first draft is completed. Study has 4 sub-teams and more than 10 people involved. Planning to have final draft before Guadalajara meeting.

Study Group 1.14

Integrated Precursor Distinguish in Multi-Geophysical Fields around Global Earthquake Events with magnitude larger than 7 in Recent 10 years

This is a new study that was started in the Jerusalem meeting. Susan McKenna-Lawlor will ask team to send a progress report in time for the Guadalajara meeting. Question arose about whether the team had contacted the Demeter team. Recommendation is for the team to liaise with Demeter Team.

4.2. New Studies Proposals

None.

5. IAA Conferences

5.1 Current IAA Conferences

5.1 Current IAA Conferences

5.1.1 Current IAA Conferences

12th IAA Low Cost Planetary Mission,

Gregg Vane reported that the next meeting will take place in Pasadena, USA, with Carol Raymond from JPL as Chair. Date will probably be June 2017, location Caltech in Pasadena. Abstract from the last meeting are available on line. This has been a series of successful conferences that first started about 20 years ago.

7th IAA Search for Life Signature,

No report?

5th IAA Planetary Defense Conference,

A Space Flight Safety Conference will take place in St Petersburg, Russia, July 4-8 2016.

5.1.2 IAA Symposia at IAC

5.1.2.1 45th IAA Symposium on the Search for extraterrestrial intelligence (SETI) Guadalajara, Mexico (IAC A4)

Program Committee Chair or representative: C. Maccone

Claudio Maccone reported that he has run 6 of these conferences. The focus is on SETI. Last conference was at IAA in Paris in 2015. Claudio Maccone will send report to Susan McKenna-Lawlor.

5.2 New Conferences proposals

All

6. Report from the IAA Permanent Committees

IAA Permanent Committee on the Search for Extraterrestrial Intelligence (SETI)

Chair: Maccone Claudio, Co-Chair: Garrett Michael, Shuch Paul,

Secretary: Siemion Andrew

??? Maccone reported that SETI has support in the US (e.g. Peter Worden from AMES) and UK (Lord Martin Rees). A Russian has offered \$100 Million for SETI research over the next 10 years (in US?). Claudio will send report to Susan.

7. IAA Heads of Space Agencies Summit

Name of person reporting

8. Other Business

All

Susan reported that Commission 1 has been asked to take over the Cooperation in Space Weather at Earth study. Previously in Commission 5. Gregg Vane made a motion to accept the study and all agreed. Gregg Vane suggested adding Dan Baker (LASP) and Athena Coustenis suggested Jean Lilen Sten. Gerhard will send other suggestions to Susan.

It was also suggested by Contant that Commission 1 take over 3.20 (study) – Expanding Options for Planetary Protection. This study is about human spaceflight and planetary protection. It was pointed out that NASA has asked the NRC to do a similar study, the European Foundation is doing a study, ISSI has done a study, COSPAR is doing a study. It was agreed that the IAA study has been overtaken by events such as all these other studies. Before we accept having the study moved into Commission 1, we want an update on how it relates to the other major studies mentioned. It is possible that the IAA study is no longer needed.

Gregg Vane reported on IAA Academy Day events planned for the COSPAR meeting in Istanbul in August. The model used in COSPAR Moscow was successful and will continue to be used: inviting speakers to give talks on major new work or topics at an accessible level. 5 speakers planned for Istanbul. Model is to have a co-Chair from host country and at least one speaker from host country. Gregg gave Susan a copy of the program for Istanbul Academy Day.

Ralph McNutt brought up the issue of how IAA studies are published and referenced. Commission 1 members are of the opinion that reports should be available electronically (free to members, for sale to others) and that citation should include all authors.

9. Adjourn