

IAA Commission 1 'Space Physical Sciences' Meeting  
Fukuoka, 16 October 2005, 08:30 – 10:00

**Minutes of meeting**

**Meeting Attendance:**

Robert Farquhar, Bernard Foing, Tom Krimigis (chair), Claudio Maccone, Sridhara Murthi, Hans-Peter Roesser, Christian Sallaberger, Gerhard Schwehm, Nickolay Smirnov (secretary), Kunimory Uesugi, Francisco Valero.

**Agenda**

1. Welcome, apologies and adoption of agenda Chair
2. Minutes from March meeting in Paris
3. Study Group activities
  - 3.1 Ongoing studies: SETI (S1.3)
  - 3.2 New study groups and leads
    - Particle Radiation Hazards at Mars
    - Follow-up from 'The Next Steps...'?
    - Others?
4. Program for 57<sup>th</sup> IAC, Valencia, Spain, October 2006
  - proposals for Highlight Lectures/Plenary events
5. IAA and COSPAR
6. Report and conclusions from IAA Asia-Pacific Regional Workshop on "Advances in Planetary Science", Bangalore, June 2005
7. Report from the IAA meeting on 'Low Cost Planetary Missions'
8. Commission Membership 2005 – 2007
9. Next meetings
10. Any Other Business

**1. Welcome**

Tom Krimigis was chairing the meeting substituting for Peter Wenzel, Commission 1 Chair. He warmly welcomed the attendees and announced Wes Huntress, the current Vice Chair, would take over the leadership for the next two years. Unfortunately, neither Peter Wenzel nor Wes Huntress could attend Fukuoka. Tom Krimigis also introduced the new Commission 1 Secretary Nickolay Smirnov.

**2. Minutes from Paris meeting**

These were approved.

**3. Study group activities**

- 3.1. Ongoing studies: SETI (S1.3) Permanent Study Group. No SETI representative was present. Thus discussion was postponed.
- 3.2. IAA Study Group proposal on 'Particle Radiation Hazards & Risk Mitigation for Humans at Mars' was made by Susan McKenna during the Commission 1 meeting in Paris. Tom Krimigis (reporting for Peter Wenzel) informed the Commission members that no proposals had been received since then and suggested to postpone the discussion till the next meeting. "Now we do not have a study group" – was his summary.
- 3.3. Follow-up from 'The Next Steps...' Bob Farquhar informed the attendees that near-term studies on the exploration vehicle in NASA are mostly aimed at Moon mission and some others, such as libration points; while missions aimed at studying asteroids need to double the life support time up to 30 days.; Gerhard Schwehm informed the attendees that ESA trends are to plan more astronomy missions, probably at libration points. Current emphasis of the Aurora project is on Mars missions – Moon projects are not interesting. The attendees suggested that a proposal on establishing a Study

Group on the topic should be prepared for consideration during the March meeting 2006 in Paris. Bob Farquhar agreed to take the lead.

3.4. The Commission also suggested that a Study Group should be established jointly between Commissions 1 and 3 on Space Nuclear Power. Commission 1 is interested in studying RTGs while Commission 3 is interested in nuclear propulsion. There is already joint session for Valencia at the 57<sup>th</sup> IAC. R. McNutt would be in charge of this group.

#### **4. Program for 57<sup>th</sup> IAC, Valencia, Spain, October 2006**

Tom Krimigis stated that the plenary event for the Fukuoka Congress (on Cassini) was that suggested by Commission 1. It was suggested that for the next congress a plenary event on the results of inner planets missions, including Mars, Venus, and Moon missions, could be appropriate. A formal request on this is to be prepared by the next meeting in Paris (B. Foing). Other suggestions/submission for the Paris meeting would also be welcome.

#### **5. IAA and COSPAR**

The question about potential areas where the IAA could cooperate with COSPAR was discussed. There was a suggestion to have an IAA day in the COSPAR meeting in Beijing. It is necessary to contact COSPAR organizers to find out if it could be arranged. Ed Stone could be the contact.

#### **6. Report and conclusions from IAA Asia-Pacific Regional Workshop on “Advances in Planetary Science”, Bangalore, June 2005**

Report from the IAA workshop in Bangalore was made by Sridhara Murthi. He emphasized that the Workshop was a great success. Representatives from 17 countries were present in the conference. Strong local support was provided by the Astronautical Society of India. 41 technical papers were presented at the Workshop. Topics covered a broad range: Mars, Moon exploration, challenges of propulsion technologies, space robotics technologies, planetary resources and technologies, space weather, and international co-ordination committees on Moon exploration. An educational outreach session was also held.

#### **7. Report from the IAA meeting on ‘Low Cost Planetary Missions’**

Report was made by Kunimory Uesugi, chair of the Program Committee. He reported that 6<sup>th</sup> IAA International Conference On Low Cost Planetary Missions was held in Kyoto 11-13 Oct 2005. The conference welcomed 79 participants from different countries. The details could be found on the IAA web site. The 7<sup>th</sup> conference on “Low Cost Planetary Missions” will be held at JPL or at Caltech, in Pasadena, sometime in the period June-Sept 2007 (Greg Vane of JPL to undertake the organization).

#### **8. Commission Membership 2005 – 2007**

The newly composed Commission 1 (see IAA C1 web site) becomes effective after the Fukuoka IAC in October. The current Vice-Chair (Huntress) takes the C1 Chair. Nickolay Smirnov will serve as the Commission 1 secretary.

#### **9. Next meetings**

The following Commission 1 meetings are planned:

- a. IAA, Paris, Tuesday 21 March 2006 am
- b. COSPAR, Beijing, July 2006
- c. IAC, Valencia, October 2006

#### **10. Any Other Business**

Tom Krimigis thanked all participants for their participation and wished fruitful work during the 56<sup>th</sup> IAC. He also thanked the incoming Commission 1 Secretary, Nickolay Smirnov for keeping notes of the minutes.