ANNOUNCEMENT

Second UN/NASA Workshop on the International Heliophysical Year and Basic Space Science hosted by the Indian Institute of Astrophysics, on behalf of the Government of India (27 November – 1 December 2006, Bangalore, India)

1. Background of the Workshops

The United Nations, in cooperation with national and international space-related agencies and organizations, organized annually since 1990 workshops on basic space science, particularly for the benefit of scientists and engineers from developing nations. Drawing on nearly 15 years of workshops on basic space science and preparations for the International Heliophysical Year 2007, the United Nations Office for Outer Space Affairs, through the IHY Secretariat and the United Nations Basic Space Science Initiative (UNBSSI) will assist scientists and engineers from all over the world in participating in the International Heliophysical Year 2007. Information on the International Heliophysical Year 2007 is available at

http://ihy2007.org

The objectives of IHY are to discover the physical mechanisms that drive the coupling of Earth's atmosphere to solar and heliospheric phenomena. The systematic global study of this interaction is to be the central theme of IHY. In view of these aims, the objectives for IHY are:

- provide benchmark measurements of the response of the magnetosphere, the ionosphere, the lower atmosphere and Earth surface to identify global processes and drivers which affect the terrestrial environment and climate;
- global study of the Sun-heliosphere system outward to the heliopause to understand the external, and historic drivers of geophysical change;
- foster international scientific cooperation in the study of heliophysical phenomena now and in the future; and
- communicate the unique scientific results of IHY to the interested scientific community and to the general public.

This Second UN/NASA Workshop has been endorsed by the United Nations General Assembly as part of the 2006 activities of the United Nations Programme on Space Applications.

2. <u>Information and Indication of Interest Form Available on the World-Wide-Web</u>

Updated information about the workshop and information material on IHY can be obtained via the World-Wide-Web at

http://ihy2007.org

and

http://www.oosa.unvienna.org/SAP/bss/ihy2007/index.html

Individuals who wish to receive further information on the International Heliophysical Year and/or wish to indicate their interest to participate in the workshop may use the electronic means available on the above WWW sites.

3. **Key Dates for the Workshop**

Announcement of the Workshop

Deadline for Applications

Notification to Authors

Preliminary Programme Issued

01 June 2006
01 August 2006
01 September 2006
01 November 2006

Workshop 27 November – 1 December 2006

4. Local Organizer of the Workshop

Indian Institute of Astrophysics (IIA)

Contact Person:

Dr. R. Ramesh

India Institute of Astrophysics

National Centre for Research and Education in Astrophysics Department of Science and Technology, Government of India

Phone: +80-2553-0583 (or) +80-2553-0672 Fax: +80-2553-4019 (or) +80-2553-4043 Email: ramesh@iiap.res.in / ihy@iiap.res.in

Web: http://www.iiap.res.in/ihy

5. Venue of the Workshop

The workshop will be held at Indian Institute of Astrophysics, Bangalore, India

6. **Programme of the Workshop**

The workshop will be structured around the following topics:

- 1. Participation of nations in project development for international heliospheric space missions and supporting low-cost ground-based instrument array initiatives for world-wide studies in space science.
- 2. Studies in preparation for the participation of developing nations in IHY.
- 3. Actions, results and practice of the access to data of the Sun-Earth system from space missions through data archives and the need for other non-space related archives.
- 4. Space missions in astrophysics and solar system studies: Opportunities and results.
- 5. Scientific results and plans for basic space science initiatives in developing nations.

During the workshop, additional working group sessions will be held to assess past and develop future activities related to the above topics.

The Second UN/NASA Workshop on the International Heliophysical Year and Basic Space Sciences will continue the work initiated during the first workshop in the United Arab Emirates in 2005 (http://www.ihy.uaeu.ac.ae/) in taking space science instrumentation, observation, and education to the developing nations of the world. This will be accomplished through the partnership between the International Heliophysical Year (IHY) programme and the United Nations Basic Space Science Initiative (UNBSSI).

A major thrust of the IHY/UNBSSI programme is to deploy arrays of small, inexpensive instruments such as magnetometers, radio telescopes, GPS receivers, all-sky cameras, etc. around the world to provide global measurements of ionospheric and heliospheric phenomena. The small instrument programme is envisioned as a partnership between instrument providers, and instrument hosts in developing countries. The lead scientist will provide the instruments (or fabrication plans for instruments) in the array; the host country will provide manpower, facilities, and operational support to obtain data with the instrument typically at a local university. Funds are not available through the IHY to build the instruments; these must be obtained through the normal proposal channels. However all instrument operational support for local scientists, facilities, data acquisition, etc will be provided by the host nation. It is our hope that the IHY/UNBSSI programme can facilitate the deployment of several of these networks world wide. In addition to discussion on the deployment of instruments, science topics on the heliophysical processes will also be discussed during the workshop.

A new feature of the second UN/NASA workshop is introducing data bases and relevant software tools that can promote space science activities. There have been enormous number of space missions that have been accumulating large data bases of scientific data. Similarly, long-term data bases are available from ground based observations. These data can be utilized in ways different from originally intended for understanding the heliophysical processes. One of the goals of the second workshop is to identify such data bases and make them available to the world community with necessary software tools so that scientists from developing countries can benefit from them without having to deploy instruments.

The second UN/NASA workshop will assess the progress made after the first workshop in 2005 and consider new instrumentation and data base projects to be implemented in 2006/2007 and beyond. In addition, key scientific topics of interest to the heliophysical community will be discussed.

Authors should state clearly for which programme topic the paper is intended. Contributions that highlight interdisciplinary issues are particularly encouraged. Poster sessions will be organized for the duration of the workshop. Authors are also requested to include with their submission a short, not longer than half-apage, biography. These will serve as the presenter's introduction prior to the session in the workshop. Abstracts of no more than 600 words must be headed by the (i) Title, (ii) Author(s) Name(s), (iii) Institutional Affiliation (s), and (iv) Email Address(s). Abstracts must be submitted in electronic format to Avoni Oyenevin, United Nations Office for Outer Space Affairs. Email Ayoni.Oyeneyin@unvienna.org

7. Selection of Participants

Participants will be selected by the co-sponsors of the Workshop, through the Local Organizing Committee and the International Scientific Organizing Committee, on a competitive basis from those who meet the qualifications provided in the Application Form.

8. Financial Arrangements

Within the limited funds available to the co-sponsors, a number of selected participants from developing countries and countries with economies in transition will be offered financial support to attend the Workshop. Funded participants will be provided with a round-trip air ticket between their international airport of departure to Bangalore, India, and daily subsistence allowance. Any cost associated with en-route expenses or any changes made to the air ticket must be borne by the participants.

Foreign participants who need assistance for their hotel accommodation in Bangalore may contact the LOC, after preliminary registration at the above website.

Note that the LOC shall be providing travel support to a limited number of participants, particularly from the Indian university sector. They may write to the LOC separately. Other Indian participants should also contact the LOC for local support in Bangalore.

9. Language of the Workshop

English will be the working language for the workshop.

10. Health Requirement and Related Topics

Potential workshop participants are advised to check with the embassy/consulate of India for obtaining the visa, if required. Note that adequate health insurance is the responsibility of the participants.

11. Registration Fee

There is no registration fee to participate at and contribute to this workshop.

12. International Scientific Organizing Committee (ISOC)

Al-Naimiy, H., United Arab Emirates University, UAE

Benz, Arnold, Switzerland

Briand, Carine, Paris Observatory, France

Chilingarian, A., Alikhanyan Physics Institute, Armenia

Chitre, S. M., University of Mumbai, India

Davila, J., IHY/NASA, Washington, DC, USA

Fraser, Brian, University of Newcastle, Australia

Gopalswamy, N., IHY/NASA, Washington, DC, USA (Co-Chair)

Hasan, S. S., IIA, Bangalore, India (Co-Chair)

Haubold, H.J., UNOOSA, Vienna, Austria (Co-Chair)

Kitamura, M., National Astronomical Observatory, Japan

Mann, Ian, University of Calgary, Canada

Mazaudier, C., CNET/CRPE, France

Potgieter, M. S., North-WestUniversity, South Africa

Babatunde, Rabiu, Federal University of Technology, Akure, Ondo-State, Nigeria

Yumoto, K., Kyushu University, Japan

13. National Advisory Committee (NAC)

Ananthakrishnan, S., NCRA-TIFR, Pune

Antia, H. M., TIFR, Mumbai

Bhattacharya, A., IIG, Mumbai

Choudhri, A. R., IISc, Bangalore

Dwivedi, B. N., Banaras Hindu University, Varanasi

Gurubaran. S., IIG, Tirunelveli

Lakhina, G. S., IIG, Mumbai

Manoharan, P. K., RAC, NCRA-TIFR, Ooty

Narayana Rao, D., NARL, Tirupathi

Reddy, B. M., NGRI, Hyderabad

Sreedharan, R., VSSC, Tiruvananthapuram

Sreekumar, P., ISRO-ISAC, Bangalore

Venkatakrishnan, P., Udaipur Solar Observatory, Udaipur

14. Local Organizing Committee (LOC)

Bagare, S. P., IIA, Bangalore

Banerjee, D., IIA, Bangalore

Hasan, S. S., IIA, Bangalore (Chair)

Kapoor, R. C., IIA, Bangalore

Ramesh, R., IIA, Bangalore

Singh, J., IIA, Bangalore

15. Organizing Secretary

Ramesh, R., IIA, Bangalore