

COMMISSION 51

BIOASTRONOMY

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David W. Latham, Eduardo L. Martín,
Michel Mayor, David Morrison,
Raymond P. Norris, Jill C. Tarter

PROCEEDINGS BUSINESS MEETING on 18 August 2006

1. Introduction

Commission 51 met on 18 August 2006. President Karen Meech chaired the meeting and there were 16 members present, including vice-president Alan Boss, and OC member David Morrison.

2. Bioastronomy 2007

One of the premier activities of our Commission is the organization of a triennial Bioastronomy meeting. The series of international Bioastronomy meetings has been ongoing since 1984. Bioastronomy, or Astrobiology, is a rapidly growing field, and there are an increasing number of international meetings which cover this subject area. One of the major activities during the past three years has been to work with members of the Federation of Astrobiology Organizations to try to reduce the number of meetings by looking for opportunities to hold joint congresses.

Table 1. Commission 51 Bioastronomy meetings

| year | IAU sponsorship | location |
|------|------------------------|----------------------------|
| 1984 | IAU Symposium No. 112 | Boston, MA, USA |
| 1987 | IAU Colloquium No. 99 | Balaton, Hungary |
| 1990 | | Val Cenis, France |
| 1993 | | Santa Cruz, CA, USA |
| 1996 | IAU Colloquium No. 151 | Capri, Italy |
| 1999 | | Kohala Coast, HI, USA |
| 2002 | IAU Symposium No. 213 | Hamilton Island, Australia |
| 2004 | | Reykjavik, Iceland |
| 2007 | | San Juan, Puerto Rico |

To this end representatives from IAU Commission 51, ISSOL (International Society for the Study of the Origin of Life), AbSciCon (Astrobiology Science Conference), and the NAI (NASA Astrobiology Institute) met in September 2004 to formulate a plan for meeting coordination. The outcome of the 9/04 meeting was an agreement between ISSOL and IAU Commission 51 to hold a simultaneous meetings in 2008 (one year later than the nominal Commission 51 meeting schedule) with some joint sessions at a site to be mutually selected. At the 2005 summer business

meeting in China, ISSOL accepted an offer from hosts in Florence Italy for the 2008 meeting and they invited participation by Commission 51. In spite of many discussions, by March 2006 it was realized that the arrangements would not work, and Commission 51 had to search for an independent venue. Proposals to host the meeting were entertained from: Mexico, Tenerife, NRAO Virginia, Yellowstone, Flagstaff and San Juan Puerto Rico. The selection of the site in March 2006 was based on cost and the availability of the Arecibo facilities as well as a unique environment for astrobiology field excursions.

President Meech described the plans for the next Bioastronomy meeting, Bioastronomy 2007 on *Molecules, Microbes and Extraterrestrial Life*, to be held in San Juan, Puerto Rico from 12-16 July, 2007. The meeting website, <www.ifa.hawaii.edu/UHNAI/bioast07.htm> is available for registration, hotel booking and abstract submission. The meeting site, the Condado Plaza Hotel, is conveniently located 10 minutes from the international airport within walking distance of old San Juan. The conference facilities are excellent, with 9100 square feet of space for both oral sessions and poster papers. A block of rooms at an excellent group conference rate is being held until June 2007.

Meech is the chair of the Local Organizing Committee and William Irvine is the chair of the Scientific Organizing Committee.

Table 2. Local and Scientific Organizing Committee members

| LOC member | institution | SOC member | institution |
|----------------------|----------------------|--------------------------|-----------------------|
| Jose Alonso | Univ. Puerto Rico | Peter Backus | SETI Institute |
| Daniel Altschuler | Arecibo Observatory | John Baross | Univ. Washington |
| Hector Ayala del-Rio | Univ. Puerto Rico | Alan Boss | Carnegie Inst. |
| Frank Drake | SETI Institute | Nader Haghighipour | Univ. Hawaii |
| Edna DeVore | SETI Institute | William Irvine | Univ. MA |
| Sixto Gonzales | Arecibo Observatory | Karen Meech | Univ. Hawaii |
| Pamela Harman | SETI Institute | Michael Mumma | NASA Goddard |
| Karen Meech | Univ. Hawaii | Carol Oliver | Austr. Ctr. Astrobio. |
| Carlos Rodriguez | Univ. Puerto Rico | John Rummel | NASA HQ |
| Michele Sonoda | Univ. Hawaii | Janet Siefert | Rice Univ. |
| Melita Thorpe | MWT Associates, Inc. | Thorsteinn Thorsteinsson | Orkustofnun |
| | | Dan Werthimer | UC Berkeley |

Irvine reported on the content of the invited speaker's program for the meeting and on the status of the acceptances to speak. The program consists of both invited and contributed talks. The session topics included: (i) synthesis of molecules and organics; (ii) comets and meteorites; (iii) outer solar system; (iv) Mars; (v) development of cells and complex life; (vi) life in extreme environments; and (vii) extrasolar planets and habitability.

In addition to the science program the meeting will have a full Education and Public Outreach component, lead by Daniel Altschuler. This will consist of a teacher workshop on Wednesday 18 July, the meeting which will offer lessons and materials related to the meeting, as well as the opportunity to interact with meeting scientists. Bioastronomy education papers will also be integrated into the main program. Tim Slater will be offering a course on "Teaching Introductory Level Astronomy and Astrobiology in the College Classroom" to meeting participants with a special workshop held July 13-15. In addition, AbGradCon will be holding a meeting for Astrobiology Graduate students on 14-15 July, just prior to the meeting. The early registration deadline for the meeting is set at 15 January 2007, the abstract and travel support request deadline is 15 February 2007, and the program will be available 1 April 2007.

The meeting sponsors include: The Institute for Astronomy, University of Hawaii, the NASA Astrobiology Institute, NAIC/Arecibo Observatory, Puerto Rico Space Grant Consortium, and the Australian Centre for Astrobiology.

3. Bioastronomy 2011

The idea of holding a joint meeting with ISSOL in 2011 was also discussed. Venues for such a joint meeting need to be solicited soon, in order for a joint venue to be decided upon in time

for the 2008 ISSOL meeting in Florence, Italy. It was decided that the Commission should take the lead in negotiating with ISSOL regarding this possibility, rather than relying on the efforts of third parties, such as the Federation of Astrobiology Organizations, who have offered to help in the past. There was a brief discussion of possible sites for the 2011 meeting, including Lake Baikal, however, given the recent locations of the meetings, a site in the central US or Canada might be appropriate for even geographic distribution.

4. New members of Commission 51

Twenty new members were accepted into the Commission at the business meeting.

Table 3. New Commission 51 members

| name | country | research field |
|-----------------------|-------------|--------------------------------|
| Ian A. Bond | New Zealand | Astrophysics |
| Rolando P. Cardenas | Cuba | Cosmology |
| Milan M. Cirkovic | Serbia | Astrobiology, galaxy evolution |
| Maria R. Cunningham | Australia | Star formation |
| William Dent | UK | Star formation |
| Helen J. Fraser | UK | Astrochemistry |
| Ray Jayawardhana | Canada | Star formation |
| Charles H. Lineweaver | Australia | Exoplanets |
| Ian C. Lyon | UK | Interstellar grains |
| Giuseppe Marzo | Italy | Astrobiology |
| Marla H. Moore | USA | Ice irradiation |
| Dominique Naef | Chile | Extrasolar planets |
| Ralf Neuhaeusen | Germany | Star formation |
| Don Pollacco | UK | Extrasolar planets |
| Nuno Miguel C. Santos | Portugal | Extrasolar planets |
| Peter J. Sarre | UK | ISM molecules |
| Mark R. Sims | UK | Space Missions |
| In-Ok Song | Korea | Astrochemistry |
| Andrew J. Walsh | Australia | Star formation, Astrochemistry |
| Wilfred M. Walsh | Australia | Radio Astronomy |

5. Election of officers and new Organizing Committee members

The Commission elected William Irvine to be the next vice-president and Alan Boss begins his term as Commission president at the end of the 2006 IAU XXVI General Assembly. Karen Meech was asked to continue to serve the Commission as past-president, given her institutional knowledge of the Commission for the last six years. One or two new Organizing Committee members will be sought, in order to widen the geographical representation. The Commission 51 membership list will be added to the web pages. Commission 51 needs to broaden its membership among IAU members, and a means to do this needs to be identified.

6. Closing remarks

There was consensus among the membership that our Commission is making progress in addressing the issues of consolidation of science meetings, and that we need to continue to be proactive. The members were keen to more actively participate in the Commission activities, and suggested that there be more frequent communication with the membership either via email or a newsletter. David Morrison publically thanked president Meech for all her efforts on behalf of the Commission for the past six years.

Karen J. Meech
president of the Commission