

COMMISSION 51: BIOASTRONOMY: SEARCH FOR EXTRATERRESTRIAL LIFE

(BIOASTRONOMIE: RECHERCHE DE LA VIE EXTRATERRESTRE)

PRESIDENT (ACTING): S. Bowyer (USA)

VICE-PRESIDENT: S. Bowyer

ORGANIZING COMMITTEE: I. Almar (Hungary), F. Colomb (Argentina), F. Drake (USA), J. Heidmann (France), A. Leger (France), M. Mayor (Switzerland), T. Owen (USA), W. Sullivan (USA), J. Tarter (USA) & K. Wellington (Australia)

1. INTRODUCTION

Professor Colomb resigned as President of the Commission because of pressing demands of work. The Organizing Committee appointed Stuart Bowyer (Vice President) as Acting President.

The Commission has proposed changing its name to "Biastronomy: Search for Extrasolar Planets and Extraterrestrial Life" to reflect our long-standing involvement in the search for extrasolar planets. The name change is pending approval of the IAU.

2. SCIENTIFIC HIGHLIGHTS 1997 - 1999

Without question, the major highlights of the field have been the substantial increase in the number of extrasolar planets which have been discovered. At the 5th International Conference on Bioastronomy in 1996 two new extrasolar planets were announced. This increased the number of known planets to seven. At the 6th International Conference on Bioastronomy in 1999, a number of new planets were also announced; at this point more than twenty extrasolar planets have been reported.

3. SPECIAL PROJECTS / OTHER ACTIVITIES

The Commission undertook the task of developing criteria for an IAU list of extrasolar planets. The IAU thanked us for our extensive efforts on this project and is in the process of setting up a Working Group on Extrasolar Planets which will incorporate our efforts.

The International Academy of Astronautics agreed to initiate a study investigating issues in setting up a radio-protected site on the moon. As part of this effort a Symposium "Protection of Part of a Celestial Body for the Scientific Benefit of Humankind: the Lunar Farside Crater SAHA Proposal" was held at the COSPAR 1998 Scientific Assembly.

4. MAJOR SCIENTIFIC CONFERENCES 1997 - 1999

International Academy of Astronautics Review of SETI Activities

Oct. 1997 Torino, Italy

Oct. 1998 Melbourne, Australia

Oct. 1999 Amsterdam, The Netherlands

The 6th International Conference on Bioastronomy, Aug. 1999 Hawaii, USA

5. MAJOR PUBLICATIONS 1997 - 1999

Astronomical and Biochemical Origins and the Search for Life in the Universe. 1997. Eds. C. B. Cosmovichi, S. Bowyer, D. Werthimer, Proceedings of the 5th International Conference on Bioastronomy, IAU Colloquium No. 161, Editrice Compositori, Bologna, Italy.

A Planet Orbiting the Star rho Coronae Borealis, R. Noyes, S. Jha, S. Korzennik, M. Krockenberger, P. Nisenson, T. Brown, E. Kennelly, S. Horner, 1997 Ap. J. 483:L111-L114.

The Discovery of a Planetary Companion to 16 Cygni B, W. Cochran, A. Hatzes, P. Butler, G. Marcy, 1997 Ap. J. 483:457-463.

The Closest Extrasolar Planet. A Giant Planet Around the M4 Dwarf G1 876. X. Delfosse, T. Forveille, M. Mayor, C. Perrier, D. Naef, D. Queloz, 1998, AA 338:L67.

A Planetary Companion to a Nearby M4 Dwarf, Gliese 876, G. Marcy, P. Butler, S. Vogt, D. Fischer, J. Lissauer, 1998, Ap. J. Letters 505:L147-L149.

Two New Candidate Planets in Eccentric Orbits, G. Marcy, P. Butler, S. Vogt, D. Fischer, M. Liu, 1999, Ap.J. 520:239-247.

6. SOURCES OF FURTHER INFORMATION

Commission 51 has developed a web site: <http://sag.www.ssl.berkeley.edu/IAUCom51>

Information about the Commission and reprints of articles of interest to the Commission are provided.

Stuart Bowyer
Acting President of the Commission