

THEORY OF STELLAR ATMOSPHERES

(THEORIE DES ATMOSPHERES STELLAIRES)

Report of Meetings, 3, 4 and 9 August 1988

PRESIDENT: K. Kodaira.

SECRETARY: D. F. Gray.

Business Meeting, 3 Aug., 11:00 am

**I. COMMISSION ACTIVITIES**

The President outlined the activities of the Commission in the period following the 19th General Assembly. The items included were (1) 1 IAU Symposium and 5 Colloquia sponsored or cosponsored, (2) 2 acting Working Groups associated with Commission 36, (3) Commission Report for the IAU Transaction A, and (4) 5 Commission Circulars and 1 supplement issued.

**II. MEMBERSHIP**

- a) DEATH: Cannon Christopher
- b) VOLUNTARY RESIGNATIONS: Muller Edith, Dumont Simone, Sobouti Yosev
- c) NEW MEMBERS: The following names were approved as new commission members.
  - (i) Present IAU Members: Brown Alexander, Freire Ferrero Rubens, Landstreet John D.
  - (ii) New IAU Members: Catala Claude, Krikorian Ralph, Steffen Matthias, Takeda Yoichi, Narasimha Delampady, Bodo Gianluige, Carlson Mats, Cugier Henryk, Bowen George M., Fitzpatrick Edmund L., Friend David B., Hartkopf William I., Liebert James W., Musielak Zozislaw E., Chugaj Nikolai N., Lyubimkov Leonid S., Nikogosian Artur G.
  - (iii) New IAU Member proposed by Commission 36: Abbott David C.

**III. ELECTION OF PRESIDENT AND VICE PRESIDENT**

Basing upon the opinion surveys by means of Commission Circulars and upon the recommendation by the IAU Executive Committee, Commission President made a proposal, which was endorsed by the attendants.

Dr. D. F. Gray was approved as President. From the three nominees for Vice President, W. Kalkofen, A. G. Hearn, and R. Kudritzki, Dr. W. Kalkofen was approved as Vice President.

**IV. ELECTION OF ORGANIZING COMMITTEE**

Basing upon the opinion surveys by means of Commission Circulars, Commission President made a proposal, which was approved by the attendants. The new OC members are: D. F. Gray, W. Kalkofen, J. Cassinelli, L. Cram, A. G. Hearn, M. Seaton, J. L. Linsky, A. Peraiah, F. Praderie, A. Sapor, T. Tsuji, and R. Wehrse.

**V. FUTURE ACTIVITIES**

(i) IAU Meetings: 5 symposia and 2 colloquia asking for the sponsorship or cosponsorship of Commission 36 were planned for 1989 and 1990. A brief discussion developed about the similarity of the topics among the meetings concerning the magnetohydrodynamic properties of atmospheres, especially in common with the meetings supported by the commissions related to the solar physics.

(ii) Working Groups: 2 new WG were proposed to which Commission 36 should be associated; WG on Astrochemistry and WG on Synthetic Photometry.

## VI. ON OTHER MEETINGS

The president introduced the scientific meetings related to Commission 36 which took place during and just after the General Assembly.

### Scientific Meeting on "Accuracy of Abundances", 4 Aug., 2:00 pm

CHAIRPERSON: R. Wehrse

- (1) Introduction (R. Wehrse)
- (2) Transition Probability (W. Wiese)
- (3) Excitation- and Ionization Crosssections (K. Butler)
- (4) Line-Broadening Constants (M. Dimitrievic, read by B. Baschek)
- (5) OB Mainsequence Stars (R. Mendez)
- (6) B-F Mainsequence Stars (K. Sadakane)
- (7) Solar-type Stars (F. Spite)
- (8) Cool Mainsequence Stars (M. Bessell)
- (9) Extragalactic Stars (B. Baschek)

Butler pointed out in particular to the "Opacity Project" initiated by M. Seaton to recalculate all relevant crosssections according to the best method available, the close-coupling method. K. Sadakane appealed the necessity to promote the intercalibration among various institutions engaged in the abundance analyses. About 100 persons attended.

### Scientific Meeting on "Stellar Surface Features", 9 Aug., 9:00 am

CHAIRPERSON: D. F. Gray

- (1) Photometry of Starspots (M. Radono)
- (2) Theoretical Aspects of Spots (P. Fox)
- (3) Ap-star Mapping (W. Wehlau)
- (4) Spectroscopy of Starspots (F. Fekel)
- (5) Starpatches and Bisector Mapping (D. Gray)
- (6) Techniques of Starspot Mapping (I. Tuominen)

Gray introduced in particular the new concept of starpatches whose main property is an enhanced velocity field. About 100 persons attended.

The reports of the following meetings associated with Commission 36 are given in the reports of the commissions in the parentheses:

WG on Ap/Cp Stars, 3 Aug., 2:00 pm (Commission 29)

WG on Peculiar Red Giants, 10 Aug., 2:00 pm (Commission 29)

Joint Commission Meeting on "Spectroscopy of Individual Stars in Globular Clusters and the Early Chemical Evolution of the Galaxy", 8 Aug., 9:00 am (Commission 29)

Joint Commission Meeting on "Solar and Stellar Coronae", 4 Aug., 9:00 am (Commission 10+12)