

COMMISSION 29: STELLAR SPECTRA (SPECTRES STELLAIRES)

Report of the Business meeting, August 17, 1979

PRESIDENT: M. HACK

SECRETARY: A.B. UNDERHILL

The first item of business was the confirmation by the Commission of the present vice-president W. Bonsack as president for the next three years and the election of eight members, Y. Andrillat, G. Cayrel, C.R. Cowley, C. Jaschek, V. Khokhlova, J.P. Swings, R. Viotti and K.O. Wright to form the Organizing Committee. It was confirmed that J. Jugaku should be vice-president for the next three years.

The president drew the Commission's attention to three atlases that have been published recently: (1) "A Photographic atlas of northern Be stars" which has been prepared by A.M. Hubert-Deplace and H. Hubert and published with the assistance of the International Astronomical Union, (2) "Revised MK spectral atlas for stars earlier than the sun" by W.W. Morgan, H.A. Abt and J.W. Tapscott, and (3) "A photometric atlas of the spectrum of Procyon" prepared by R.E.M. and R.F. Griffin. These may be ordered by contacting the authors at the Meudon Observatory, Kitt Peak Observatory and The Observatories, Cambridge, England respectively. A 4th catalogue of stars having MK spectral types will be published by the Dept. of Astronomy, Northwestern University, Evanston, Illinois in November 1979. Information may be obtained from W. Buscombe.

The question of working groups was discussed and a reorganization is to take place. Pro-tempore Chairmen have been appointed to coordinate membership and organize the election of a Chairman and steering Committee.

<u>Pro-tempore Chairman</u>	<u>Title of Working Group</u>
M. Jaschek	Be stars
C.R. Cowley	Ap stars
L. Pasinetti	Standard stars for Equivalent Widths and Line Profiles

The working group on ultraviolet spectra has been dissolved.

It was decided that the President of Commission 29 should write a letter to R.E.M. and R.F. Griffin expressing the Commission's great interest in their Procyon Atlas and its appreciation of the Griffin's work in preparing such an excellent and valuable Atlas.

Future Symposia and Colloquia of interest to Commission 29 were discussed. Five are under consideration.

- (1) W.W. Weiss (Vienna) has prepared a workshop on "Short time-scale variation in Ap stars" to be held in Vienna in late June or early July, 1980.
- (2) H.G. Groth (Munich) has proposed that a Colloquium on "Be stars" be held at the Munich University Observatory in the Summer of 1980.
- (3) C. Chiosi (Padua) and R. Stalio (Trieste) have proposed that a Symposium on "The evolutionary effects of Mass Loss" be held in Trieste in June or September 1980.
- (4) G. Cayrel (Meudon) has proposed that a Colloquium on "G and K stars as tools for understanding Galactic Structure" be held in Paris in 1981.

Aller emphasised the value of those who have large stores of spectra needing

study making this material available to astronomers from countries which had no access to large telescopes. The transcription of the needed material can be easily carried out for spectra that are already in digital format. Bonsack said that he was willing to compile and circulate a register of all astronomical spectroscopists giving a brief summary of their fields of expertise. He will be sending out a form to collect the required information and the members of Commission 29 are asked to cooperate in this venture.

H.J. Lamers gave a brief report on the meeting on emission-line stars which was held in Trieste in June 1979. The discussion emphasized the value of comparing normal stars with emission-line stars of about the same type for obtaining information about the physics of stars.

A vote of thanks to M. Hack for her capable and enjoyable presidency of the Commission was proposed and passed with enthusiasm.

Anne B. Underhill
Secretary, Commission 29

Other Activities of the Commission

Two Joint Discussions were held with the participation of Commission 29: Ultraviolet Astronomy. Results from recent Space Experiments (Commissions 28, 29, 34, 44, 45) on August 15, 1979, and Physics of the chromosphere-corona-wind complex and mass-loss in stellar atmospheres (Commissions 10, 12, 29, 35, 36, 44) on August 16, 1979. Commission 29 has participated in the organization of a Joint Meeting on Am stars with Commission 45 and has organized two Joint Meetings on Stellar Abundances and Stellar Rotation with Commissions 36 and 45 with the following programs:

Stellar Abundances (Aug. 18, 1979): Chairman W. Bidelman

Invited papers: D.L. Lambert, The accuracy with which stellar abundances can be determined.

B.E.J. Pagel, Red giants in globular clusters and large scale variations in the galaxy.

L.H. Aller, Abundances in outer galaxies.

Short contributed papers:

R. Foy, G. Cayrel: Why the pressure induced splitting of the curve of growth should not be ignored in abundance determinations.

A.B. Underhill: The importance of the choice of a representative model atmosphere for interpreting anomalous line intensities in B-type spectra.

M. Spite: The problem of Aluminium in 6 old halo dwarfs and giants.

R.E.S. Clegg, D.L. Lambert, R.A. Bell: Isotopes of Titanium in cool stars.

R.E.S. Clegg: Aluminium in CS molecules in the Carbon star IRC +10216.

F. Thevenin, G. Cayrel, R. Foy: Some comments on the latest papers on the so-called super-metallicity in G and K stars.

G. Cayrel, M. Bentolila: Toward a fourth edition of $\left[\frac{\text{Fe}}{\text{H}}\right]$ determinations.

L. Rossi: A tentative suggestion for He abundance in Feige 86.

I.N. Glushneva, V.T. Doroshenko: Stellar energy distribution in the spectra of main sequence B-F stars. Comparison with theoretical models.

Stellar Rotation (Aug. 21, 1979) Chairman A. Slettebak

Invited papers: L.V. Kuhi, Rotation of very young stars.

Myron Smith, Late-type star rotation.

M. Plavec, Rotation in binary stars.

Short contributed papers:

- J.B. Hutchings: Determination of v and i for fast O and B-type rotators.
L. Carrasco: Specific angular momentum in late-type stars (flare stars).
G. Belvedere, L. Paternò, M. Stix: Differential rotation of main sequence stars.
R. Rajamohan: Stellar rotation of main sequence single and binary stars.

Moreover a panel discussion on Ap stars was organized by C.R. Cowley and S.J. Adelman, and a workshop on the extraordinary object SS 433 was held together with Comm. 40, 42, 48 (see report of Comm. 42).

The working group of Comm. 29 and 45 on Ap stars has elected the following organizing Committee: C.R. Cowley (chairman), V.L. Khokhlova, M. Hack, M.M. Dworetzky, S.C. Wolff, D.S. Leckrone, M. Gerbaldi, M. Jaschek.

The working group on Be stars has elected the following Organizing Committee: M. Jaschek (chairman), A.M. Delplace, A. Feinstein, P. Harmanec, L. Houziaux, A. Slettebak, A. Underhill.