

COMMISSION 27: VARIABLE STARS (ETOILES VARIABLES)

REPORT OF MEETINGS: 16, 17, 21 August 1979

PRESIDENT: J. Smak

SECRETARY: Nancy R. Evans

ADMINISTRATIVE MEETING, 16 August 1979

1. In Memoriam.

The President spoke briefly in commemoration of four deceased members: P.L. Bhatnagar, B.V. Kukarkin, P. Th. Oosterhoff, and E. Vandekerkhove. Members stood in silence for a minute in memoriam.

2. Nominations.

The Commission agreed to nominate the following Organizing Committee for 1979-82:

President: J.D. Fernie  
Vice-President: N.H. Baker  
Members: M. Breger, M.A. Cherepashchuk, A.N. Cox,  
M.W. Faest, H. Gursky, W.E. Kunkel, J.  
Smak, W. Wenzel.

3. New Members.

The President proposed that the Organizing Committee be authorized to review the list of candidates and decide on their admission. The motion was carried unanimously.

4. Archives of Unpublished Photoelectric Observations.

Dr. M. Breger reported on the working rules and the present status of the Archives. He proposed that a formal letter be sent to the editors of major astronomical journals suggesting that they should recommend to their authors to deposit lengthy tables of pe observations with the Archives rather than trying to publish them in extenso. After a long discussion the members voted against such a drastic measure. The members expressed their appreciation to Drs. W. Fitch, M. Breger, V.P. Tsesevich, and E. Makarenko for their work in maintaining the Archives.

5. Nomenclature.

Dr. M. Breger reported on a meeting of Commission 5 with representatives of several other Commissions on problems of the nomenclature. The proceedings of this meeting are published elsewhere.

6. I.B.V.S.

The Editor of I.B.V.S., Dr. B. Szeidl answered questions concerning editorial policy and other problems. The members expressed their appreciation to Dr. Szeidl and his collaborators for their extremely useful work.

7. G.C.V.S.

The President read a letter from the Editors of G.C.V.S. containing information on their work, including preparations for the next edition. A motion for the continuation of the I.A.U. sub-division to the Moscow Variable Star Bureau was proposed by the President, seconded, and carried unanimously.

SCIENTIFIC MEETING, 17 August 1979  
FLARE STAR WORKING GROUP

The following summary is by Dr. P.B. Byrne:

Dr. C. Jordan delivered an informal presentation on interpretation of UV spectra and Dr. B. Bopp gave some opinions on possible future directions for optical observations. Lively discussions took place and it came to light that a number of groups (at Armagh, Catania, and Sacramento Peak) are independently involved in UV spectroscopy of flare stars in both their flaring and "quiescent" states. Indeed subsequent discussions with the Boulder group showed that they and the Armagh group have contiguous programmes between September 6 and 11. People interested in cooperative ground-based observations are invited to contact P.B. Byrne (Ireland) or J. Linsky (USA).

A broader definition of the working group's activities is necessary, these being no longer confined to the study of flaring. Rather there is now interest in applying all available diagnostic tools to the study of chromospheric activity in the latest type dwarfs. With this in mind it was decided to discontinue the international cooperative programme of optical monitoring of a selected group of flare stars on a regular year-to-year basis. In its place we would urge observers to search for activity in stars not hitherto shown to be active, to expand our knowledge of its occurrence in as wide a range of spectral types as possible.

With the resignation of the previous Chairman, Professor Mavridis it was decided to form an organizing committee for the future. For details of the composition of this committee members are referred to coming issues of I.B.V.S. Future plans include a possible workshop meeting on flare stars to be held during September 1980. Those interested in joining the group should contact Dr. B.W. Bopp (Univ. of Toledo), Dr. P.B. Byrne (Armagh Observatory), Dr. M. Rodono (Catania Observatory), or Dr. S.P. Worden (Sacramento Peak Observatory).

SCIENTIFIC MEETING, 21 August 1979

The following papers were presented:

- W. Eichendorf - HR 4511
- J. Arsenijevic - o And
- M. Friedjung - Infrared Observations of Kuwano's Nova-Like Object
- M. Popova, E. Vitrichenko, N. Afanasiev - KR Aur
- G. Bakos - A New Short-Period Eclipsing Binary
- G. Bakos - Variability of some Solar Type Stars
- H. Maracco - The Period Changes of RY Sgr
- H. Pedersen - Optical Bursts from the X-ray Burster MXB1636-53
- R. Foy - Variation of the Diameter of Mira.

SCIENTIFIC MEETING, 21 August 1979  
Joint Meeting of Commissions 27 and 35  
on "STELLAR EVOLUTION AND VARIABLE STARS"

The following papers were presented:

- L.A. Willson - Pulsational Constants of Mira Variables
- A.N. Cox - The Structure of Yellow Giants and Cepheids
- D.S. King - The Structure of Am Stars, Delta Del Stars, and Delta Sct Variables
- N.R. Simon - Resonances in the Cepheid Instability Strip
- M. Breger - Multiple Radial/Non-Radial Periods in 38 Cnc
- M. Savedoff - Comment on Two-Dimensional, Rotating, Quasistatic Evolution Calculations
- D. Sugimoto, M.Y. Fujimoto, K. Narai, K. Nomoto - Generalized Theory of Shell Flashes
- M.Y. Fujimoto, D. Sugimoto - Type I Supernovae and Helium Shell Flashes
- K. Nomoto, S. Miyaji, D. Sugimoto, K. Yokoi - Supernova Explosion Triggered by Electron Capture
- C.-C. Wu - IUE Observations of Cen X-4 and Nova Cyg 1978
- H. Bond - The Difference Between Classical and Dwarf Novae.
- P. Noerdlinger - Diffusion of Helium in Population II Stars.