

EDITORIAL

The June Institute

With a fifth one successfully behind us, the June Institute is well on its way to becoming an Institution.

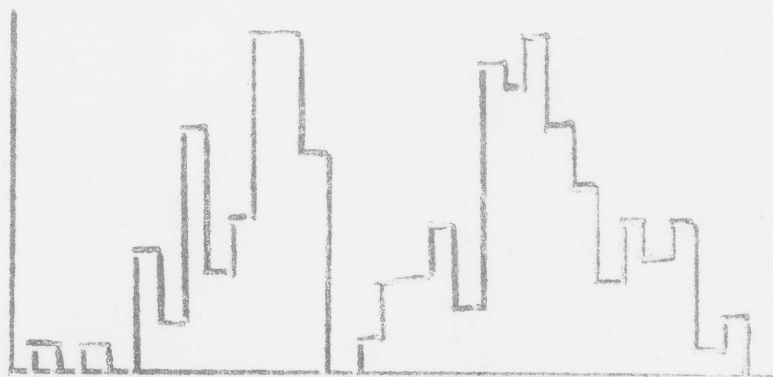
Launched in 1967 under the enthusiastic direction of Dr. Anand, the Institute has kept pretty well to its original form: a series of reviews of topics which are in the forefront of astronomical research presented by four outstanding experts in the fields. We have had in turn: Felten, Matthews, Peebles, Woltjer; Christy, Kraft, Schücking, Spiegel; Burbidge, Thorne, Prendergast, Friedman; Bahcall, Kellermann, Osterbrock, Waymann; and this month Iben, Preston, Arp and Mestel. Attendance in 1967 was 40 "outside" guests, in 1968 - 49, in 1969 - 100, in 1970 - 95 and this year 99. About two-thirds of these have been Canadian astronomers and graduate students, the rest mostly Americans.

In the past there have been no examinations attending the series of lectures, but this year an anonymous examiner has set a "paper". A few of the searching questions:

1. M31 and the Galaxy are connected by a straight line through the point precisely midway between them. Explain, at length, in terms of:
 - a) the ejection hypothesis
 - b) spectroscopic patches
 - c) the theoretical blue edge
 - d) Halton Arp
 - e) teensy weensy bangs
2. Reproduce from memory Dr. Iben's slide number 19 (Lecture 2). Be sure to label all axes.
3. Spell "oblique". Explain.

4. Choose which description best fits the following diagram:

- a) the distribution of QSO redshifts
- b) Period-frequency relation for RR Lyrae variables in ω Centauri
- c) lightcurve of an Ap star
- d) rate of change of obliquity with Helium abundance
- e) George Preston



5. Discuss the colour-frequency relation of Icko Iben's sports jackets. Exercise to be left to reader, pronounce Icko Iben. (Answer,).

All joking aside, we owe a great debt of gratitude to Dr. Anand's tireless enthusiasm and to those who have helped him: Drs. Seaquist and Roeder in previous years; and to Dr. Racine who was in charge this year. Our thanks are also owing to President Bissell for generous financial support and to the Departmental and Observatory Secretaries.

J.F.H.

OBSERVING

The spectrograph of the 74-inch telescope has been fitted with a filter holder and neon comparison source, so that it will henceforth be possible to obtain spectrograms at 24 Å/mm in the 6000 - 10000 Å with the use of IN plates. Dr. West of the State University College at Buffalo proposes to observe^a binary which he has been studying in the hopes of detecting the secondary star. Dr. Fernie would like to have a look at the IR spectrum of the carbon star, R Cor Bor, Dr. Heard at ϕ Persei which is reported to be unusually bright in the IR. Other projects are invited, but it should be realized that IN plates are very slow, even when sensitized.

Forms have been circulated for requesting observing time on the 60-cm telescope of the U. of T./ Las Campanas Observatory. Regular observing could begin in August. Dr. Garrison who was in Chile last week reports that the house is nearly ready for occupancy and that the dome is in working order and ready for the telescope. Dr. Racine and

Gerry Longworth expect to go to Chile in mid-July to supervise the installation and make the adjustments.

A tidy little battery-operated three-stage image tube destined for Las Campanas was tested recently by Dr. Racine and Dr. Heard on the guiding eyepiece of the 74-inch spectrograph. It gave an image of a 9th magnitude star on its one-inch screen which could be viewed with ease at a distance of several feet. This has prompted reconsideration of a C C T V system of guiding with one of the newly-developed LLL cameras. With a monitor and a hand-set in the warm-room who would want a coudé? - Unless it would be some fussy guy interested in higher dispersion, improved stability, greater efficiency and such trivialities!

Dr. van den Bergh's two-coordinate measuring machine arrived and has been set up in the measuring room.

COMINGS AND GOINGS

Dr. Hogg attended her class reunion at Mount Holyoke College, South Hadley, Mass. - the 45th-on the weekend of May 29. (Her class was runner-up for having highest proportion of living graduates present.)

The Roeder family have left today by car en route to Tucson, Arizona where Dr. Roeder will spend a sabbatical year.

Dr. MacRae has been in New York during the past two days attending meetings of the Universities Space Research Association and the Associates of the University of Toronto Inc.

Dr. Coutts will return on July 2 from an observing session at Cerro Tololo.

Jack Winzer has returned from a Palomar observing session.

Dr. Hogg and Dr. Heard attended the Royal Society of Canada meeting in Ottawa on June 6-9 (where the latter was elected Rapporteur of the Interdisciplinary Division of Section III). Dr. K.O. Wright, with Mrs. Wright, returned with them for a visit to the Toronto area. Dr. Wright spent June 10th at the Observatory conferring with members of the staff.

Several staff members are taking early summer vacations: Sheila Smolkin has been in Europe, Kathy Graham on the west coast, Dr. Hogg will be at her Dunstable home for the next two weeks, the Racine family in Quebec, and Alice Kato will leave for Poland in mid-July.

Dr. D.P. Hube (Ph.D. 1968) of the University of Alberta will arrive on July 1 to spend a month observing and measuring.

SEMINARS

JUNE

Apart from the June Institute there was only one seminar in June: Dr. R.S. Booth, University of Manchester, on "Observations of OH Emission Sources at Jodrell Bank", on June 22.

JULY

Dr. David Sher (MA 1960 of Cincinnati Observatory will speak on the Structure of Clusters on Tues. July 6 at the Observatory.

PAPERS SUBMITTED FOR PUBLICATION

S. van den Bergh, "The Intrinsic Color of Maffei No. 2".

J. Percy, "The Rate of Change of the Period of BW Vulpeculae".

M.D.T. Naylor "The Effect of Uniform Rotation on Stellar Convective Cores".

R. C. Roeder "On the Origin of the Absorption Lines in Quasar Spectra"

MISCELLANEOUS

Dome Floor

A new terrazzo floor has been laid in both levels of the big dome. Thanks to cooperation of the contractors and some luck with the weather, no observing time was lost.

Born

To Mr. and Mrs. David MacRae, a son, Duncan Campbell, first grandchild of Dr. and Mrs. MacRae, on May 30, in Toronto.

To Dr. and Mrs. Serge (Ph.D. 1966) Demers in Sudbury, on May 19, a daughter, Valerie.

Departures

Walter Gorza (M.Sc. 1970) has resigned as Research Assistant to attend College of Education in Kingston during July and August and to accept a post as science teacher in Winston Churchill Collegiate, Scarborough, commencing in September.

Appointment

Mrs. Sharon Fisher has been appointed to the Assistant-Secretary post vacated by Ursula Dewsbury.

Promotion

Dr. Seaquist has been promoted to Associate Professor effective July 1.

Degrees

Postgraduate degrees were conferred at the June 9 Convocation: Mark Naylor was granted a Ph.D.; John Booker, formerly a graduate student in the Department, later a high school teacher enrolled in a master's program in teaching, was granted an M.Sc. on the basis of graduate courses completed.

GASA

Elections were held for the executive council of the Graduate Astronomy Students Association on June 23. Elected were: Gretchen Hagen, President; Bob Chambers, Vice President; Chris Pritchett, Sec.-Treas.; Bill Herbst, rep. for GSU.

Orals

Charles Dyer and Jacques Vallee have passed their General Ph.D. Oral Examinations.

Sick List

Gerry Longworth who underwent leg surgery early in the month visited the Observatory yesterday and expects to return to work July 5. Meanwhile Dave Earlam is confined to bed with back trouble.

CAS Membership

Any reader, Canadian citizen or not, resident of Canada or not, who has the other qualifications and who would like to join the newly formed Canadian Astronomical Society is urged to write to Dr. Rene Racine. It is possible that the "normally resident in Canada" clause may be relaxed.