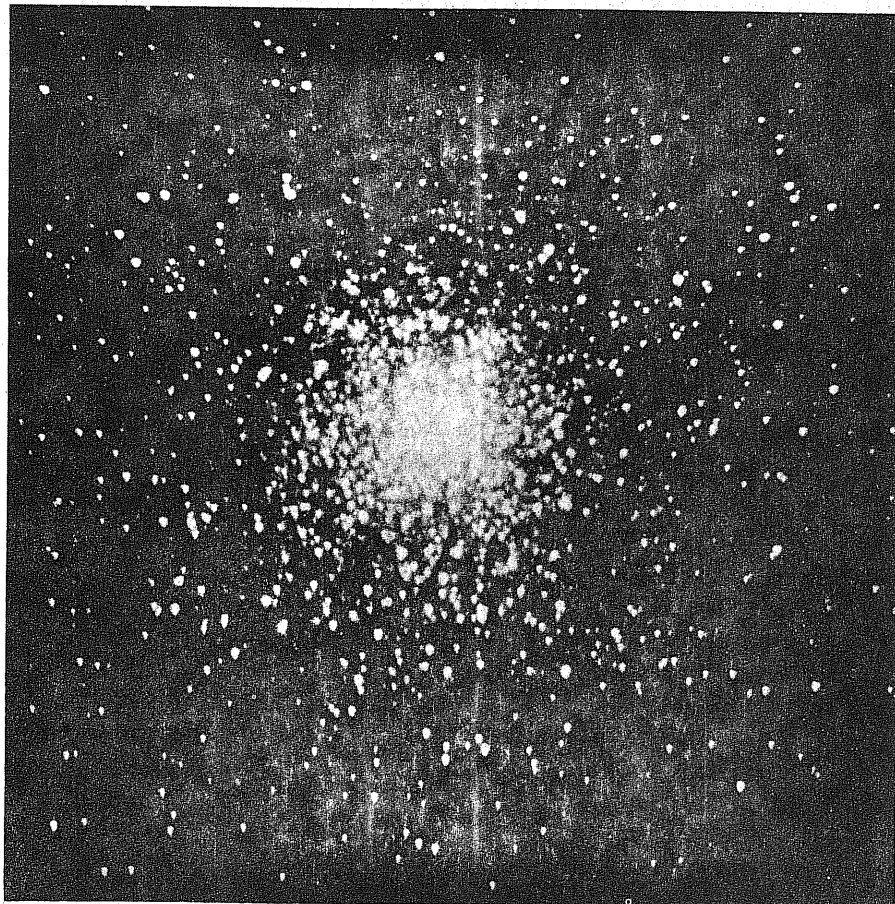


DAVID DUNLAP DOINGS

Vol. 12, No. 6

SEPTEMBER 7, 1979



CFHT'S FIRST PHOTOGRAPH

The X-ray globular NGC 7078 - M15

FIRST LIGHT FOR THE CFHT

The goal our CFHT colleagues set for themselves was to produce the first photograph in time for the Montreal General Assembly. It was late in the night of 6/7 August that the first image was visually observed through the telescope, using the newly aluminized and installed mirror. The previous 24-hours had been occupied with feverish activities of adjustment, resetting, rebalancing, etc. necessary when the dummy mirror was replaced by the real one. And, even though it was 4:30 A.M., the historic occasion was celebrated appropriately at the base-camp before everyone went to bed.

The first photograph wasn't taken until 10/11 August but Roger Cayrel was able to bring the negative with him to Montreal. René Racine had a print made and it received prominent display at the CFHT booth. We reproduce it on the cover of this issue. North is up but west is to the left. The scale of the original photograph is 15 seconds of arc to the millimeter but the cover is an enlargement of about twenty times; the images of a millimeter or less confirm the kind of seeing all of us are expecting on Mauna Kea! When one or the other of the field correctors are in place we should have better than 1" images over a field of up to 46 minutes of arc.

Other CFHT milestones are the deadline for the first set of proposals for allocation of time (September 10) and the formal and official dedication of the telescope which is to take place on September 28.

AN ENLIGHTENED ADMINISTRATION

At least one Canadian university administration has the sagacity to recognize a winning combination and place its bets accordingly. The advertisement reproduced here appeared in University Affairs for September, 1979. We hope this example, set by the University of Victoria and its President, Dr. Howard Petch, will quickly be followed by other institutions in their own best interests. Surely Canadian astronomy has never before had an opportunity such as it now has to achieve new levels of excellence.

Astronomy

The department of physics at the University of Victoria anticipates the establishment of an endowed position for a distinguished astronomer at the full professor rank to begin on or after July 1, 1980. Candidates should possess an extensive research record and have an international reputation. They should be willing to interact with faculty, research personnel and students at the university and with others in the community of astronomers in Victoria. Preference will be given to an observational astronomer with theoretical interests. In addition to the availability of research facilities at the university and at the near-by Dominion Astrophysical Observatory opportunities will exist for observing time on the 3.6m Canada-France-Hawaii telescope which is now nearing completion in Hawaii. Expressions of interest, enquiries and applications are invited. Please reply to: chairman, department of physics, University of Victoria, Victoria, B.C. V8W 2Y2, Canada. The closing date for receipt of applications is January 1, 1980.

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A RECORD FOR PHOTOMETRY AT DDO

September 4/5 was a night of sufficient haziness (and near full moon) that I almost didn't attempt any photoelectric photometry. But as it happened I was left gaping as the numbers reproduced below came rolling off the on-line computer. Taken over almost an hour, they must surely be the best I've ever seen at DDO in nearly twenty years.

Star	V	Star	V
HR 8130	3.923	HR 8157	6.135
8157	6.134	8130	3.922
8130	3.921	8157	6.136
8157	6.133	8130	3.923
8130	3.921		

While this may be a record, good photometric nights at DDO are not quite such a rarity as folk-lore would have one believe. We now routinely work to the third decimal, and a precision of better than 0.01 mag is not at all unusual in at least differential work. Just as pleasing, of course, is the knowledge that our equipment, no less than the sky, shows a very high degree of stability.

Don Fernie

P.S. We are happy to announce that the DDO is now equipped with a set of "DDO filters" and is in position to perform "DDO photometry"! The original ones wandered off with Bob McClure some 12 years ago so he could continue the work he started in his thesis.

Eds.

COMINGS AND GOINGS

Bill Weller has been appointed to the post of Research Associate at DDO where he will be working with Tom Bolton and John Lester on the development of a Reticon system for the 74-inch spectrograph and other similar projects. Bill will start work part time in mid-October and full time in mid-November. He is currently completing his Ph.D. on Spectrophotometry of Wolf-Rayet Stars at York under the supervision of Stan Jeffers. Bill has also worked on instrumentation projects for Ralph Nicholls at York.

Tom Bolton will be on sabbatical from September 1 until next August 31. Following a holiday, he hopes to spend most of his time closeted in his office at DDO writing papers. If this goes well, he has plans to travel to eastern Europe late next spring to consult with colleagues at Ondrejov Observatory, Warsaw, and Moscow.

Robert Roeder slipped away quietly on a full-year sabbatical which began July 1. During this time, he will be working with John Wheeler at the University of Texas at Austin.

Peter Martin has returned from a 12-month sabbatical leave. He spent the last four months at the Institute of Astronomy in Cambridge, working on SS 433 and learning about gaseous nebulae. Prior to that he wintered at the University of Arizona, where he undertook various observing projects involving optical polarization. His first four months were also spent in Cambridge.

Peter spoke at the Universities of Cambridge, Oxford and Sussex during the spring term on the topic "The wavelength dependence of interstellar polarization".

Don MacRae is also a returnee, having spent four of his six months of sabbatical at l'Observatoire de Haute Provence. There he met French astronomers, rattled around a first class library which he had almost to himself, and used some of the excellent telescopes at that national observatory of France. On his way back he paid a brief visit to Cambridge, checking up on the Canadian contingent there.

IAU SYMPOSIUM AT TORONTO

IAU Symposium No. 88, Close Binary Stars: Observations and Interpretation, was held on the St. George campus from August 7 to 10. The approximately 170 astronomers from 26 countries were kept busy with a range of social events as well as with the scientific sessions. The week started with a Welcome Reception hosted by GASA in the West Hall of University College on Monday evening. More than one participant had problems making it to the opening session the next morning.

The major areas of discussion included massive binaries, mass transfer and mass loss, Algol systems, cataclysmic variables and polars, x-ray binaries, RS CVn systems and related objects, and contact binaries.

The Observatory was on display Tuesday evening as three bus loads of astronomers made the trip to Richmond Hill. The official banquet, held on Captain John's Flagship, the M.S. Jadran, was addressed by past commission president, Frank Bradshaw Wood. He was impressed by the effort that went into the organization of the Symposium and commended the graduate students on their ability to throw a good party!

Bln & Cbt

THE MONTREAL GENERAL ASSEMBLY

Despite characteristic self-doubts that Canadians could ever successfully host an International Astronomical Union General Assembly (be it in Vancouver, Winnipeg, Toronto or Montreal) the XVIIth, just concluded, turned out by all accounts to be one of the best in recent years. Perhaps no blood was shed but most certainly there was sweat and probably some tears on the part of our colleagues in Montreal in the months, weeks and days of preparation for the affair. Not to mention the days of August 14 to 23 during which about 2100 participants spent 294,000 man-hours talking, listening, standing, sitting, arguing, scoffing ..., and consumed 75,000 cups of coffee and several hundred thousand doughnuts between 88,200 breakfasts, lunches and dinners.

The halls of the University of Montreal academic building where the sessions were held were crowded but that turned out to be a blessing because we could shuttle from this room to that in short order and check one's mail box, pick up a copy of the Assembly newspaper ("Meteor(e)"), say hello to someone not seen since Grenoble, and buy some stamps, all en passant. The projection facilities and services were first rate; we have heard no complaint - which is a thing to be marvelled at - and we suspect that the young folk recruited from far and wide to do that job were specially instructed and threatened with the wrath of Lord Batten if they goofed.

Two memorable goofs that did occur are worth recording, though. The young lady who was our guide on the Saturday afternoon excursion was doing her best to inform the bus riders about Canada. "You may have noticed the flags at half-mast", she said. "That's because of the death of one of our former Prime Ministers", she went on, and added "named Eisenhower". The other was the honourable member of Parliament who welcomed the participants on behalf of the people of Canada at the opening ceremonies. Confidently he rolled off the names of the centers of astronomical activity across the nation, ending with that flourishing institution on the west coast, the Dominion Astrological Observatory! For that you left us, Sidney?

DDO had a good contingent. It included Margaret Heard, and also Peter Biermann and Bart Bok, part time staff members in 1979, and Allan Yen. Also seven graduate students, two of whom were projectionists (Crabtree and Barceloux) and one the sole reporter on the staff of Meteor(e), Martine Normandin. The others were Chris Corbally, Joan Wrobel, Chris Rogers and Wendy Freedman. Helen Hogg was featured, with her picture, in Meteor(e). Don Fernie got photographed with Mayor Drapeau (the latter gave all 2100 of us a magnificent luncheon on the first day). Nancy Evans, Karl Kamper, and Al Irwin (& Barb) were there, and the rest of us: Bln, the two Clements, rG, PPK (Robie wasn't far away at Van Kleek Hill), Py, Md, and the two MR's.

One of the most pleasant aspects of the General Assembly was to see there so many former associates of DDO from near and far.

Jeudi **16** **Août** **1979**
Thursday **16** **August**

Réunions des commissions et discussions communes
Commission Meetings and Joint Discussions

Salle Room	09.00 (a)	11.00 (b)	14.00 (c)	16.00 (d)
A-2285	J.D. 7	J.D. 7	J.D. 7	J.D. 7
F-2245	40, 28	40, 28	40, 48	40, 48
G-2215		48	4, 7, 8, 19, 24, 31	
B-2305		27	41	41
3325			25	
	09.15 (a)	11.15 (b)	14.15 (c)	16.15 (d)
H-0245	24 (Space Astrometry)		28	28
K-0215			9	9
D-0305	16 + 17	16 + 17	16 + 17	16 + 17
3315	21	21		
3335			26	

PROGRAMME

Heure Time		Lieu Place
17.30	Comité exécutif Executive Committee	Salon du Recteur
17.30	Sous-comité des finances Finance Sub-Committee	3310
20.30	Séance spéciale "La vie dans l'univers" Special session on "Life in the Universe"	A-2285

Programme des accompagnants
Programme for Registered Guests

- a.m. Le Vieux Montréal et Radio-Canada
Old Montreal and Radio Canada
- p.m. Musées/Museums

Départs quotidiens/Daily -
de/from: Hôtel Reine Elizabeth(08.45 ou/or 13.45)
Pavillon 3200 (09.15 ou/or 14.15)

IAU POST-ASSEMBLY VISIT TO DAVID DUNLAP OBSERVATORY

On Saturday, August 25, the Observatory was host to a group of astronomers who were on a post-congress tour between Montreal and London, Ontario. The thirty or so visitors mingled with the ten local staff and students on hand to greet them, and after an informal outdoors lunch on the Observatory lawns were taken on an extensive tour of the DDO facilities. Judging by the visitors' response, we now have a good many more friends around the world.

Fe

P O T P O U R R I

We are pleased to learn that *Steve Shore* has accepted a position as Assistant Professor at Case-Western Reserve University and the Warner and Swasey Observatory. Steve has been at Columbia as a Research Associate since completing his thesis here about a year ago.

Phil Kronberg has recently been appointed by the NRAO to chair the Advisory Committee for the Very Large Array. This committee advises on operation and further development of the VLA.

Congratulations to *Joan Wrobel* on passing her Oral General Examination on July 30. For her thesis, Joan is making radio observations of compact core sources in the nuclei of nearby elliptical galaxies. Ernie Seaquist is her thesis supervisor.

Bob McLaren and *Bill Gilmore* attended IAU Symposium #87 on Interstellar Molecules at Mont Tremblant Quebec, August 6-10. Bob was co-author with Al Betz (U.C. Berkeley) of a paper entitled "Infrared Heterodyne Spectroscopy of Circumstellar Molecules".

Bob Garrison gave a talk entitled "Life on Other Worlds" on July 11 at a breakfast meeting of the Second Mile Club for retired businessmen.

Chris McAlary and *Rick McGonegal* have just returned from a very successful observing run at Kitt Peak. They had 5 nights of visual photometry scheduled on a 36-inch telescope of which 2 1/2 were clear followed by 9 nights of infrared photometry on the 50-inch - all clear but one! This is exceptionally good for KPNO in August - traditionally the monsoon season. Chris is making multicolour observations of the nuclei of x-ray galaxies for his thesis.

Ernie Seaquist and *Bill Gilmore* spent a week in mid-August at the Center for Astrophysics, Cambridge, reducing HEAO-2 data on SS433 and one other compact radio source in a supernova remnant. Bill later went to NRAO Charlottesville to produce final radio maps of SS433 from VLA data obtained in July.

Martine Normandin has accompanied her husband *Richard* to a laser physics conference in Japan with a stopover in Hawaii and visit to the CFHT.

John Percy attended the IAU General Assembly in Montreal, where he gave invited talks on "The Teaching of Astronomy in Canadian Schools" and "Recent Theoretical Results on Delta Scuti Stars", and an informal talk on "Short-Period Light Variations in Be Stars".

Bob Gauthier passed his Oral General Exam on September 7, 1979. For his thesis, Bob will be doing a spectroscopic study of Cepheids as a function of phase. Bob Garrison is his thesis supervisor.

At the IAU General Assembly in Montreal *Don Fernie* was elected President of the IAU Commission 27 (Variable Stars), up from vice-President 1976-79. *Nancy Evans* served as secretary to Commission 27 during the Assembly.

Helen Hogg attended IAU Symposium 85, Star Clusters, held at the University of Victoria August 26-30. She reports that she and *Barry Madore* were the only ones currently associated with U. of T. who attended, but many of the hundred astronomers present had U. of T. connections. Before the symposium she took the IAU excursion bus trip through the Rockies, the only Canadian astronomer who took it!

Bob Garrison used the IUE satellite in June to observe solar-type stars in order to set up a classification scheme in the UV. Preliminary results indicate that the Sun is well-placed at G2V by UV criteria. He also visited the Yerkes Observatory for the week of 29 July to discuss joint projects being carried out with W.W. Morgan. While there he gave a talk "Reaching out: new facilities for Canadian astronomers".

Congratulations are in order to Bob McLaren, Nancy Evans, Barry Madore, Dave Turner and John Lester, all of whom became members of the IAU at the close of the Montreal General Assembly.

Dave Turner returned on September 6 from a 14-night run at Kitt Peak, having lost only about 12 hours in total to cloudy skies. He received an added bonus of extra "dark time" on his last night as a result of the eclipse of the moon.

PAPERS SUBMITTED

J.R. Percy	The Periods of BDS 1269A
M.S. Normandin and P.P. Kronberg	Linear Polarization Measurements of Extragalactic Radio Sources at $\lambda\lambda$ 17.4 and 18.9 cm
D.G. Turner	The Case for Membership of the 67 ^d Cepheid S Vulpeculae in Vulpecula OB2
D.G. Turner and A.F.J. Moffat	Anomalous Extinction in the Carina Nebula?
P.G. Martin and M.J. Rees	A Model for SS433: Precessing Jets in an Ultra-Close Binary System
J.D. Fernie	Collected Reminiscences of John Frederick Heard

J.D. Fernie	A Simple Means of Detecting Cepheid Binaries
B.F. Madore	Contamination Gradients in Elliptical Galaxies
B.M. Madore	Terminology and Fundamental Data on Globular Clusters
B.F. Madore	Observations of Classical Cepheids
J.P. Bradie and B.F. Madore	The Period-Luminosity Relation for Cepheids: I. Numerical Simulations
C.T. Bolton	Results from the 1977 Coordinated Observing Campaign on HDE 226868 = Cygnus X-1
M.C. Lane and J.B. Lester	The Energy Distributions of Classical Metallic-Line Stars
J.F. Heard (posthumous) and R.F. Griffin	Radial Velocities of Certain Stars Previously Measured at the David Dunlap Observatory

COLLOQUIA*

September 12	Th. Schmidt-Kaler, University of Bochum "Theories of Spiral Structure"
September 13 (Thur.)	Hans A. Bethe, Cornell University "Supernova Collapse" (Joint Astronomy-Physics, Room MP 102, 4:10 P.M.)
September 19	Mary Lane and Joan Wrobel, University of Toronto G2000 - Current Literature Seminar
September 26	R.N. Henriksen, Queen's University "Beam Models of Radio Sources"
October 3	Dominique Barceloux and Douglas Gies, University of Toronto G2000 - Current Literature Seminar
October 10	Elly Berkhuijsen, Max Planck Institute, Bonn "A Comparison of Optical and Radio Data on Messier 31"
October 17	Dennis Crabtree and Lindsey Davis, University of Toronto G2000 - Current Literature Seminar
October 24	R. Deupree, Boston University "The Cepheid Instability Strip" (Tentative Title)
October 31	Bob Gauthier and Rick McGonegal, University of Toronto G2000 - Current Literature Seminar

* Unless otherwise noted, colloquia are held on Wednesdays at 4:00 p.m. in Room MP 137 with TEA at 3:45 in the Reference Room, MP 1404

BARRY HITS THE ROAD AGAIN

In August, while all of Toronto was immersed in the activities of the "Close Binary Star" Symposium Barry Madore dodged off unnoticed to the conference on "Photometry, etc. of Galaxies" organized by Commission 28 and held in Austin, Texas. There he delivered a paper on "Accretion Gradients in Elliptical Galaxies". The following week it was back to the I.A.U. in Montreal to present a 10 minute (sic) review of future projects on Cepheid variables at the Joint Discussion on Stellar Instabilities. Next, a quick drive to Toronto bringing Roger Davies to the Department for a few days and an impromptu seminar on "Velocity Dispersions and Rotation Curves in Elliptical Galaxies". The following day Barry was off to Victoria and the DAO for the I.A.U. Symposium 85 on "Star Clusters".

After passing through Toronto at month's end he is now off to the Royal Observatory, Edinburgh, for what he hopes is the final session of cataloguing peculiar galaxies from the Schmidt Survey. My how time flies!

REVISIONISTS' CORNER

Every so often, I get a sharp reminder that the public perception of astronomy and astronomers is considerably less sophisticated than I would like to believe. The most recent such experience occurred a few weeks ago during a conversation with a neighbour. It went something like this.

- Neighbour: Say Bob, what line of work are you in?
- MLr: I'm an astronomer with the University of Toronto.
- Neighbour: Is that so? Well, I always thought astronomy was B.S.
- MLr: Really? What makes you say that?
- Neighbour: Oh, I see my wife reading that stuff all the time.
- MLr: Your wife reads the *Astrophysical Journal*?
- Neighbour: No, the *Sun*.
- MLr: Oh, you're talking about *astrology*, and you're right - that *is* B.S.
- Neighbour: Well I'm glad you agree with me, but seeing as you're an astrologer, tell me - Do you believe in terrestrial life?
- MLr: Don't you mean *extraterrestrial* life?
- Neighbour: Hell, I don't care if there's any *extra* ones; I want to know if there's any at all.