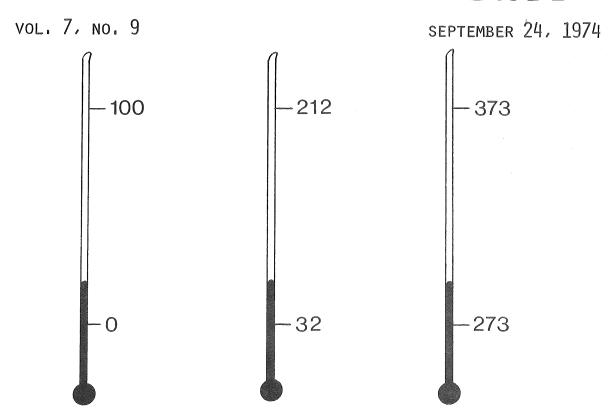


DAVID DUNLAP DOINGS



The Scales of Three Famous Astronomers

EDITORIAL

Two Ways to Dodge Import Duty

In the course of his Sept. 13 talk to the RASC Toronto Centre on the CFHT Don MacRae told us of the complicated manoeuvring that the Board of Directors had to engage in so as to ensure that the telescope components and accessories coming from Canada and France would not be subject to duty upon entering the U.S.. This brought to my mind the following story.

About ten years ago I had a visit at the Observatory from an elderly member of the RASC. He had just acquired a Questar and he was very excited and pleased with himself. He had gone to the plant in the U.S. to pick out just the model and just the accessories he wanted. I said it must have cost him enough, what with that 33% tariff! Well, no, he said, in fact he didn't pay any duty. Did he smuggle it, I asked. No, it was like this:

When my friend grumbled to the Questar people about the price and the duty they said that they had a regular practice which seemed to work pretty well with their Canadian customers. It was a matter of how the bill-of-sale was made out. So they gave him a bill of sale to show at Canadian Customs.

Arriving at Customs my friend said, yes, he had purchased something in the U.S., and here it was and here was the bill-of-sale. The Customs man looked at the Questar and at the bill-of-sale and consulted his handbook and said O.K. and sent him on his way.

The bill of sale said "long-range microscope". There was no duty on microscopes.

J.F.H.

COMINGS AND GOINGS

Don Fernie is due back this week from a two-week observing session at Las Campanas.

Jack Heard spent two days in Victoria during the course of a family visit to B.C. saw their new microphotometer in action and the CFHT four-metre disk on the grinding machine.

Bob Deupree attended the AAS meeting in Rochester last month, presenting a paper on "Convection as a Non-Radial Pulsation".

Helen Hogg represented the Observatory at the international conference on "Perspectives in Spectroscopy" held at Mount Tremblant, P.Q. Sept. 4-7 in honour of the 70th birthday of Gerhard Herzberg.

Sidney van den Bergh is away observing at Kitt Peak until the 23rd of Sept. and in Paris from the 24th - 28th for meetings relative to the CFHT.

SEMINARS

SEPTEMBER

Wed. 25th 4 pm Barry Madore, "UBV Photometry of Galactic and McL. 137 Extra-Galactic Cepheids".

OCTOBER

Tues. 1st Bill Harris, "Local Group Globular Clusters" 4 pm D.D.O.

Tues. 8th Nancy Evans, "An Observational Search for 4 pm. D.D.O. Overtone Pulsations in Cepheid Variables".

Tues. 15th Dr. Colin Scarfe, U. Vic. "Apsidal Motion". 4 pm. D.D.O.

Tues. 22nd Bill Herbst, "Reflection Nebulae, Galactic 4 pm. D.D.O. Structure and Extinction Law".

Tues. 29th Dr. Pim FitzGerald, U. of Waterloo, "Distant 4 pm. D.D.O. Galactic Structure in Puppis".

PAPERS SUBMITTED IN SEPTEMBER

R. Garrison New MK Types for Bright Stars I. South of -53°. & G.L. Hagen

POTPOURRI

Appointments

John Sorvari has resigned his PDF to take a one-year appointment at the University of Guelph as assistant professor to teach their elementary astronomy course.

John Schmidt (PDF 1968-69) has accepted a one-year appointment as Visiting assistant professor at the University of Missouri at Rolla.

Bob Hawkins has a sessional appointment at Seneca College as teaching master in astronomy.

Mark Naylor, Ph.D. 1971, has accepted a position at Mars Inc. in Toronto.

Bereaved

Bob Garrison suffered the loss of his father, Robert W. Garrison, who died Aug. 27 in Aurora, Illinois. Mr. Garrison had been seriously ill for some time and Bob had visited him twice during August but he died while Bob was in Marseille. Bob returned for the funeral.

Born

To Mark (Ph.D. 1971) and Margot Naylor a son, Jason, in May.

To Post-doc Eli Honig and Mrs. Honig a daughter.

Return to Cantab

Simon White has completed his master's project here and has returned to his studies in Cambridge.

Married (past perfect)

Bloor Street United Church was the scene of the wedding of Gretchen Hagen and Bill Harris on Aug. 24, Rev. Bob Smith, formerly of Richmond Hill, officiating. Gretchen was attended by her new sister-in-law Margaret Harris and by her close friend Bonnie Telfer of Lindsay. Bill's best man was Bill Cairns of Edmonton, the ushers were Michael Finkelman of U. of T. and Dave Hanes. Frank Giffen of Edmonton was the soloist. Gretchen's father, Mr. Jack Luft, and Mrs. Luft and Bill's parents Prof. and Mrs. Walter Harris completed the bridal party who received the guests under sunny skies on the lawn of the Heards' place in Markham. Among the out-of-town guests were Prof. and Mrs. John Hagen of State College Penn. and other friends of Gretchen and Bill from the U.S. and the West. Gretchen and Bill left in a clatter of tin cans to fly to Edmonton whence they embarked on a two-week motor trip in the Rockies - mostly Jasper. They returned Sept. 8 looking pretty happy about the whole thing.

Near Tragedy

Bob Garrison's collaborator Rudy Schild of Harvard-Smithsonian, who has visited the DDO several times, had a close brush with death recently when he was struck by lightning at Mount Hopkins Observatory near Tucson. Only the quick action of a colleague who massaged his heart saved him.

New Graduate Students

The following have reported for graduate studies in astronomy:

Dorothy Fraquelli, Univ. of Michigan; Gerald Diamond, St. Mary's Univ.; Ihor Prociuk, Laurentian Univ.; Margaret Buckby, Temple Univ.; Andrew Leir, Univ. of Victoria. Steven Shore, Stony Brook; Gilles Menard , Univ. of Montreal; Richard Gray, Washington State U; Nikolas Kasimos, U.of T.

Advertisement

"Urgent Mini-thesis Project Available"

Recent advances in photographic technology have produced IIIa-J and 127-02 emulsions which are capable of reaching a green magnitude of 24.6 and an orange magnitude of 23.7 with the 200-inch telescope. For the production of exceedingly faint colour-magnitude diagrams it would be of considerable interest to relate the instrumental colour systems defined by these plates to the international B,V system. 200-inch and 48-inch Schmidt plates are available for this project. Please give me a call if you would be interested in photometering these plates as a thesis project.

Sidney van den Bergh 884-9562

Celsius, Father of Swedish Astronomy

FINAL ITEM

Driving back to work on a broiling July afternoon recently, I was momentarily taken aback to hear the CBC announcer casually announce that the downtown Toronto temperature was 33°. A reminder, of course, that the metric system is steadily creeping up on us. (This, no doubt, is much to be desired, although enthusiasm for scientific orthodoxy can get out of hand at times. In South Africa, where conversion to the metric system is so complete that even the decimal points have given way to commas, I was recently confronted by a newspaper advertisement for a diet food that began with the blazing challenge: "Are you overmass?"

Well, since we'll soon all be talking in degrees Celsius, it may be the time to recall that Anders Celsius was an astronomer. He is, in fact, often referred to as the father of Swedish astronomy. Born in 1701, he got off to an early start by being appointed Professor of Astronomy at Uppsala University while still in his twenties. Like some example triumphantly produced by a modern anti-tenure league, Celsius had no sooner been appointed than he took off for several years to wander around Europe and complete his education. It was while in Paris that he met Maupertuis, who was preparing one of those two famous expeditions that were sent out, one to Peru, one to Scandinavia, by the French Academy in the 1730's to measure arcs of latitude in order to settle the fearful Newton-Cassini controversy & to whether the earth is prolate or oblate. Celsius was invited to join Maupertuis' expedition, which was the one to what is now

Finland, and it was the astronomical work that he did there that brought him to the attention of other European astronomers.

Perhaps it was because he died while only in his early forties that Celsius never achieved more fame as an astronomer. Perhaps not. His reputation as the father of Swedish astronomy seems to rest mainly on the great improvements he wrought in the teaching of astronomy at Uppsala rather than on his own research work. Even so, I was interested to find that in 1740 he was among the first to try building an astronomical photometer. His results were not very good, however, and another century was to go by before success was achieved in this field.

Celsius did not, in fact, invent the centigrade temperature scale. It had been around for some time, but it was a paper that he wrote in 1742 ("Observationer om twänne beständiga grader på en thermometer") that led to its general acceptance. Even so, the original Celsius scale was reversed in the sense that he assigned 100° to the freezing point of water and 0° to its boiling point. It was from the Uppsala Observatory itself that in 1747, three years after Celsius' death, came the suggestion that the numbers go in the opposite direction. Throughout the remainder of the eighteenth century the scale was known simply as the 'Swedish thermometer', and only in the early nineteenth century was Celsius' name attached to it.

And just in case you were wondering, Gabriel Fahrenheit was not only a contemporary of Anders Celsius, but was a maker of astronomical instruments who developed his thermometric scale as a consequence of visits to another Scandinavian astronomer: Olaf Römer of Denmark.

So there you are; throw in Kelvin's astronomical leanings if you will, and astronomy has got the temperature business pretty well sewn up!

The Englishman's Brolly

The following is taken from the pages of The Observatory (1906). It concerns the poor fellow at the Greenwich Observatory who was in charge of the magnetic records.

When the first electric-train service was started in London the earth-current records were almost ruined. The line was at some distance, and it was several days before it occurred to Mr. Ellis to connect the curious and violent disturbance of the records with the newly-instituted service. To make sure of the facts he visited the line, and found that the time-table corresponded exactly with the hours of perturbation. But now a new trouble arose: on his return from the visit, the magnets began to show vagaries. They behaved correctly in his absence, but promptly and invariably resented his presence, until one remarkable day when he appeared at the observatory without any salute from the magnets! It was Mrs. Ellis who found the clue to the puzzle, when asked by her husband what he could have done that day differently from any other day. "Why! you forgot your umbrella",

she said; "I found it in the stand after you had gone." And this gave the explanation. The umbrella's spokes had been magnetized on the occasion of the visit to the electric railway, and when it was brought up to the observatory and put in its usual place it disturbed the magnets.

That probably took place during George Biddel Airy's tenure as Astronomer Royal, and if so Mr. Ellis must have been relieved indeed to find the explanation. Airy had been known to demand hanging for less. Although, thank God, Mr. Ellis' bowler hat was never implicated.

J.D.F.