

the Spectrum

BUFFALO ASTRONOMICAL ASSOCIATION INC.
BUFFALO MUSEUM OF SCIENCE
HUMBOLDT PARKWAY
BUFFALO NEW YORK 14211

Editor: Ernst E. Both

MAY - JUNE 1977

MAY MEETING: Friday, May 13, 8:00 p.m. (EDT), in the Auditorium, New Science Building, State College at Buffalo, Elmwood Ave. Our guest speaker will be Dr. James Orgren, Dept. of Earth Science, State College, who will explore with us the fascinating "History of Planetariums on the Niagara Frontier." For the past 30 years or so, several planetariums have existed in Western New York - some are still with us, others are no longer in operation. They have and still do play a significant role in the astronomy of this area. Dr. Orgren is intimately familiar with planetariums and he has dug up interesting details concerning their history in this area. We welcome Dr. Orgren!

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JUNE MEETING: June 10, 8:00 p.m., same place as above. By constitution and tradition the June meeting is our annual business meeting, part of which will be devoted to the annual report of the President. Three positions on the Board of Directors are to be filled: Those currently held by Richard Zygmunt, Robert Mayer, and William Deazley. Mr. Deazley has declined to run for an additional term, while both Mr. Zygmunt and Mr. Mayer are seeking additional terms. In addition, the nominating committee has nominated Dr. Jack Mack and Carl Milazzo for membership on the board. You will be asked to select and vote on three positions. Nominations from the floor will be accepted at the June meeting. The following members have been nominated for election to the College of Fellows: Mr. Thomas Dessert, Mrs. Edith Geiger, Mr. Robert Mayer, and Dr. Fred Price. Voting on these nominees will also take place at the June meeting.

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REVISION OF THE BY-LAWS: The Association's By-Laws currently in use were formulated some 15 years ago. Since that time the Buffalo Astronomical Association has changed considerably and some of the provisions of the By-Laws are no longer workable. Consequently a committee, recently appointed by the Board, is formulating certain changes in these. This would be the right time to enlarge membership on the Board, to ensure a broader representation of interests on the Board. If you have any thoughts or suggestions, please contact our secretary, Mr. Rowland Rupp (839-1842). Suggestions are welcome.

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"WONDERS OF THE SKY" - a ten-week course conducted by Larry Carlino at Beaver Meadow, will be offered Saturday evenings beginning June 18th (8-10 p.m.). The fee for this course is \$ 15.00 for members and \$ 20.00 for non-members (the latter fee includes membership in the B.A.A. for one year). Checks should be made out to "Beaver Meadow Environmental Education Center." Enrollment is limited, so apply early.

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* WHERE IS EVERYBODY? ONE MAN'S VIEW OF SPACE INTELLIGENCE * By Bob Kirchgessner

Many of us can, from time to time, more than we have given ourselves credit, chuck away the daily cares of our localized reality with its burdens and sadnesses, and go to our records or tapes and put on to play a Holst's "Planets" or Ligeti's

"Atmospheres" and thus rescued we are properly ready and sublimated for the interstellar roamings of our spirit. This for me at least, for decades, has been my "Rocky Mountain High!"

Beyond our daily reality, a transitory construct of modes, fables, fits, foibles, and shallow material distraction, lies the real universe, violent to even the explosion of galaxies; an endless abyss, now beckoning us no less than did the howling wilderness beckon our remote ancestors as they fled encroaching ice ages, crouched at cave openings, watching nature through patient eyes narrowed or gleaming, as the blizzards howled. The storms did not destroy but strengthened us, as Thoreau says of man-verus-winter. Now we watch with gleaming eyes, narrowed or calculating, the nearer suns. When our time comes, certainly in not too many generations and perhaps not so long as that, when we drift away from here as spores, thistledown into the endless dark, what will we find? Conversely, who will, or could ... or HAS! come to us?

Dr. Teller once asked rhetorically, while lecturing on possible visitations to Earth, "Where is everybody? Is it possible that they are a form of life that we have not recognized as such?" Along these lines Professor Carl Sagan, exobiologist, has divided possible galactic civilizations into types I, II, III (and IV; but they'd be so advanced they'd have no one to talk to but themselves). Sagan feels that any number of advanced entities have been by this way since the birth of our planet some four and one half billion years ago, and the more recent ones -- within past few millenia or so -- might have left calling cards. Not the familiar, popularized black box or object beeping some alien wavelength: something more exotic: for what nearly all scientists have in common -- or should have -- are senses of curiosity and wonder; it is what we do NOT see and CANNOT yet imagine that gives some of us (laymen too, why not?) that "far away look."

For an analogy of this surmise, I quote Northwestern Astronomer J. Allen Hynek: "Suppose," he said, opening his new book Edge of Reality, "that in a few thousand years it will be commonplace to speed ideas through space faster than light (although almost inconceivable today) and that such thought forms can be made to materialize and behave like material objects light years away from the projector. Now, this," he continues, "is sheer fiction. But we can imagine it. What is there out there that we can't imagine?"

Yet there are still a few audible scientists, who wearily suggest there is no life of any consequence elsewhere. Why? Because, they insist, we here on earth evolved through such an unlikely and unrepeatable sequence of planet-type, geological, molecular, radiation-factor and climatological events as to quite likely be ALONE. This type of thinking, curiously cloistered, man-earth oriented, is reminiscent of the fire-brand chauvinism of the Church's Inquisition fourhundred years ago, when men who held to the Copernican view were humiliated, tortured, brainwashed and even, in the case of a Dominican Monk named Giordano Bruno, burned at the stake. For decades Bruno had walked the continent, a heretic holding that the universe, in its boundlessness, held an infinitude of worlds whereon dwelled rational -- and perhaps morally superior beings.

The "Inquisition" as such, today, is a mere subtle shadow of its former self in most countries, characterized now by science academies and boards, a typical activity of which was some decades ago to vilify Harlow Shapley, who put the sun far, far from our galactic center and enlarged the galaxy by a factor of ten. And so it goes. Today science does grant that half of the 250 billion suns in our galaxy have planetary systems, even to the extent of some of the binary stars having habitable, safely orbiting orbs thereby. But no one, they say, can come or go from these more distant worlds -- for even the radiation formed on vehicles windshields as hydrogen particles encountered

at near light speeds would require mountains of shielding!

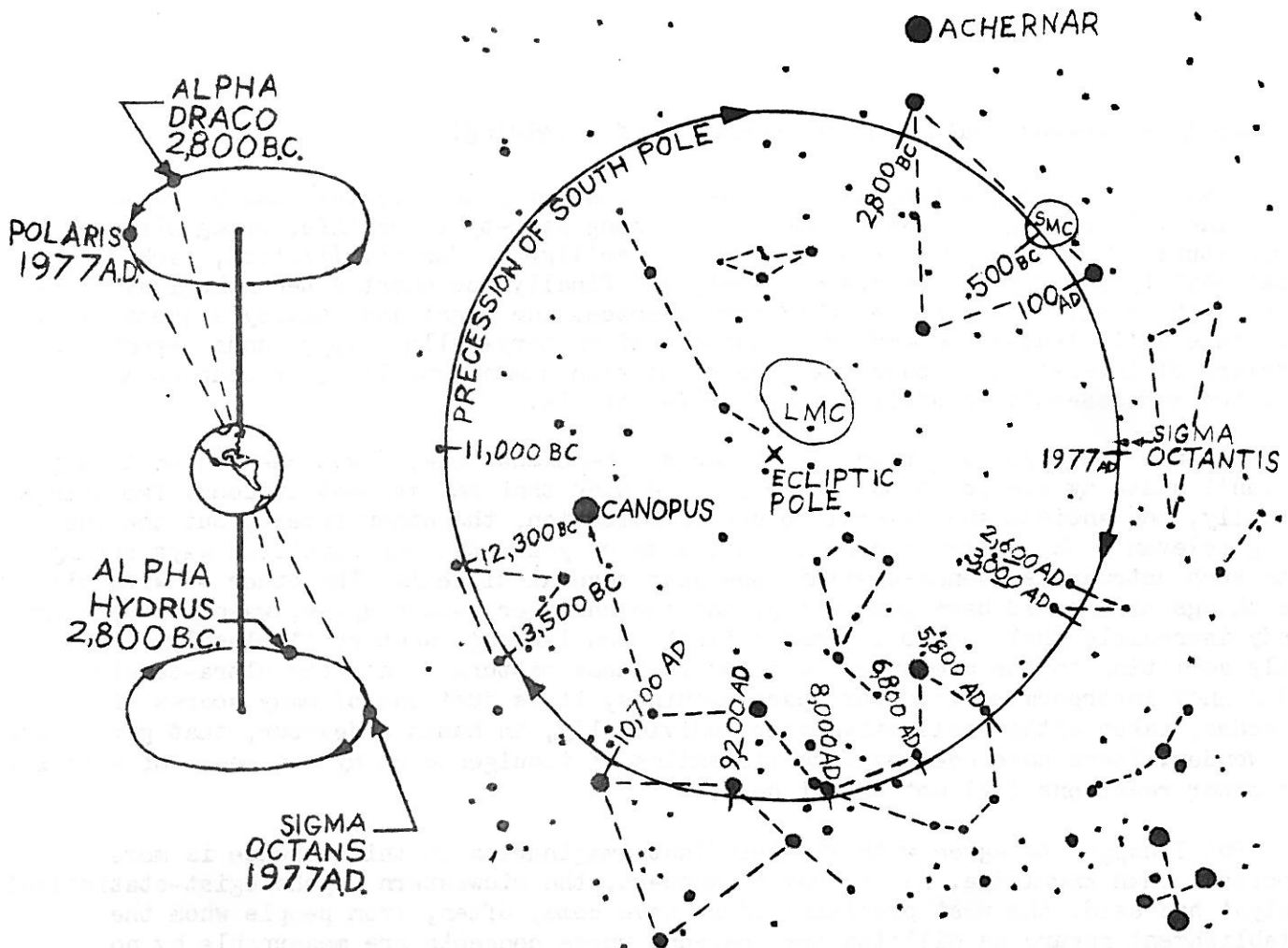
What is largely granted, is that the billions of planet systems can be repeatedly subdivided, deducting in several steps for: wrong star-type for life, wrong planet temperature for life, wrong or non-existing intelligence for civilization, lack of local ability and DESIRE for space travel, and finally too short a technological lifetime of the civilization to get busy across space. One might add Shapley's quote here: "All this still leaves hundreds of thousands of mystery-filled happy lands beyond the barriers of interstellar space where we might find human-type life, or near human." He often and assertively affirmed this belief of his.

Not too long ago, after my B.A.A. Aerial Phenomena talk, I was queried as to why I didn't state my own position: there IS something that has me most curious. Two things, actually, one ancient and general to our civilization, the other recent; but the two being relevant: Why, after scores of thousands of years did our civilized ways spring with such untoward suddenness within the past several millenia? The other -- with all the things that could have gone wrong, and the engineer's-odds agree, wasn't it peachy-dandy incredible that Apollo 11, man's first moon landing, went so flawlessly? While fully admitting to the pressures involved in these matters -- and the ultra-careful redundancy incorporated into our space machines, it is just one of many scores of episodes, taken either collectively or individually, in human endeavour, that give pause for wonder. There have been many gentle smiles of indulgence at my own sense of wonder -- and other reactions I'll not repeat here.

But I happen to agree with Einstein that imagination in this essence is more important than knowledge. As Dr. David Saunders, the midwestern psychologist-statistical analyst has said, the most promising ideas have come, often, from people whom the establishment regard as dilettantes; persons whose concepts are measurable by no bureaucratically acceptable parameters. Yet these people, who first have to find themselves, have to be found by each other; and then by the still-shamanistic establishment. And these latter, burdened by stories-high stacks of statistics are perhaps involuntarily wearing blinders, and are, as Herman Kahn puts it, rendered "incapacitated by education."

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* SPY AND TELL * Dr. Jack Mack has donated a number of astronomical books to be raffled for the observatory's benefit. Our sincere gratitude to Dr. Mack! *** The following members had their telescopes on display at the Erie Community College South Towns Fair, April 22-24: Ken Biggie, Larry Carlino, Miro Catipovic, Bill Chambers, Orrin Christy, Paul Curtin, Tom Dessert, Bob Dietrich, Bob Hewitt, Bob Mayer, Rowland Rupp, and Walt Whyman. The Kartyas Memorial Telescope was also on exhibit as was Bob Mayer's mount and Orrin Christy's mirror grinding machine. A large number of photographs by various members, as well as drawings by Larry Carlino and Edith Geiger, and paintings by Dr. Fred Price were also on display. The following members manned the very successful exhibit: Ken Biggie, Orrin Christy, Mr. and Mrs. Tom Dessert, Mr. and Mrs. Carroll Geiger, Mr. and Mrs. Irv Goetz, Mr. and Mrs. Bob Hewitt, Carl Kalweit, Dave Maul, Rowland Rupp, and Walt Whyman. To all of these our very special thanks for a job very well done! ... What well-known B.A.A. personality has "become unfaithful to Selene and started an affair with Jupiter?" Oh, the price of sin! ... Ken Biggie will become Director of Community Development in West Seneca on May 16th. He is chairman of the Erie and Niagara County Coastal Zone Management subcommittee, and a member of the Land Use and Population subcommittee of the "208 Water Quality Management Program." In addition he finds time to be on the Beaver Meadow Environmental Center's Board of Managers. *** Olga Lindberg has written (cont'd p.6)

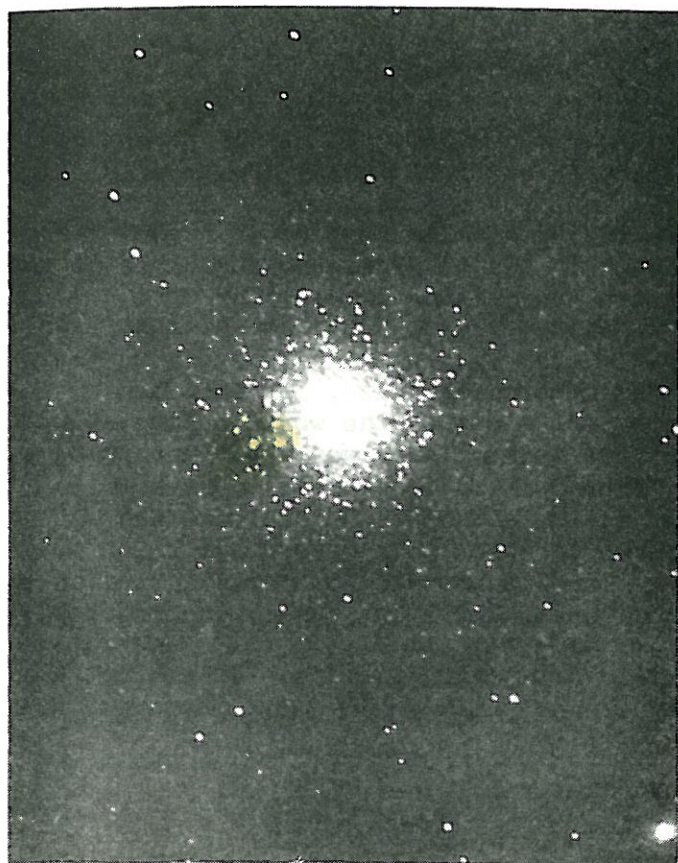


Map of the South Celestial Pole and precession circle, by Carl Milazzo (see his article in the March-April issue of "The Spectrum.")



On this and the next page we publish photographs by Tom Dessert, to illustrate Galaxies, Nebulae, and Globular Clusters as they are seen and may be photographed through the 12½-inch telescope at our Observatory at the Beaver Meadow Environmental Education Center.

Left: Galaxy M 51, 20 minutes, 103 aF film.



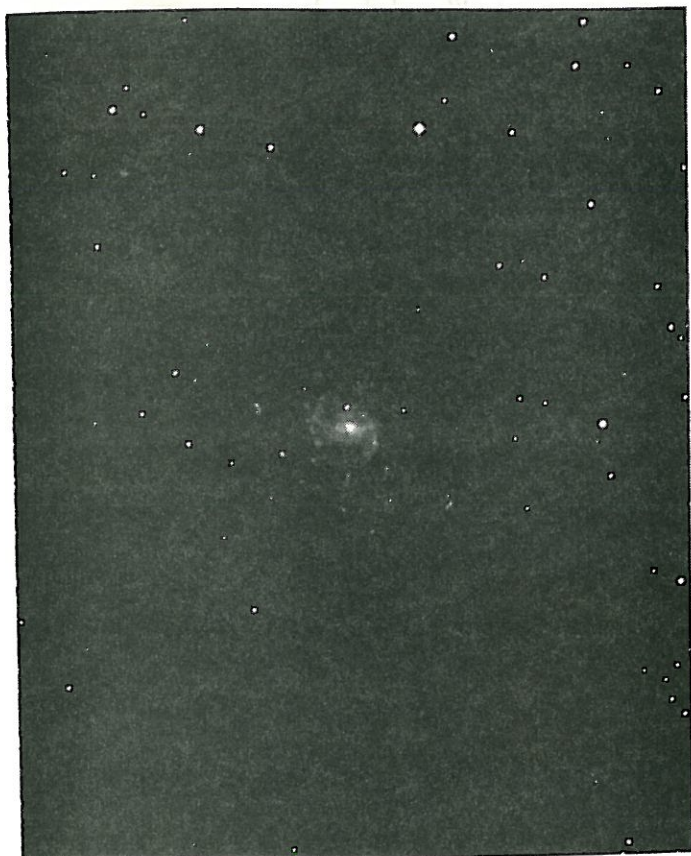
M 13, 5 minutes, TRI-X

M 101, 30 minutes, 103 aF



M 8, 20 minutes, 103 aF

M 104, 20 minutes, 103 aF



(SPY AND TELL cont'd from p. 3)

and illustrated a book on "Buffalo in the Gilded Age, 1850-1900." It may be purchased from the Buffalo and Erie County Historical Society (Historical Museum). ... Gerry Cook is busy growing vegetables under artificial lights in her basement to give them an early start for her garden ... Paul Curtin is making a solar projection screen for his 2.5" refractor ... Ed Lindberg has six students in his telescope making class at the Museum of Science ... Bob Mayer is going to engrave the setting circles for Miro Catipovic's new 20" Cassegrain reflector ... Bob Mayer has also designed and installed a declination drive for Rowland Rupp's 6-inch reflector. It's working fine ... On their way back from Sanibel Island (where they collected numerous shells), Irv and Esther Goetz visited the Vanderbilt Planetarium in Centerport - one of the world's largest with the main projector showing 11,369 stars (Irv counted them all and was very impressed) ... Orrin Christy is finishing a racing hydroplane, "The Spirit," on which he has been working for 19 months. He will test it late next month, and hopes he can make the Regatta on June 4-5. *** It is amazing the extremes to which some members will go to get in Spy and Tell. Tom Dessert was clearing his land in preparation for planting an orchard when he cut a $3\frac{1}{2}$ inch gash beside his left knee. Thirty stitches were required to close the wound.... One of our distinguished members was chasing a white mouse in his car when his actions attracted the attention of the county sheriff. His conduct was a little hard to explain, but he managed to convince the sheriff that such behavior was quite normal - for him.

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* F I R S T C L A S S *

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