

FOCAL POINT



Newsletter for the

Milwaukee Astronomical Society

December 1991

Seasons Greetings

Another year draws to a close and another will soon begin. The officers and directors of MAS wish everyone of all faiths a pleasant Holiday Season and happiness and good health in 1992.

From The Editors

Of course we echo the warm sentiments from above, We expand this thought with a special Thanks—not only for the contributions received for the *Focal Point*—but also as friends sharing in the many Society sponsored events throughout the year. For this, and especially during this season of joy and thanksgiving, we are truly grateful.

-Matthew McNeely & Tom Gill

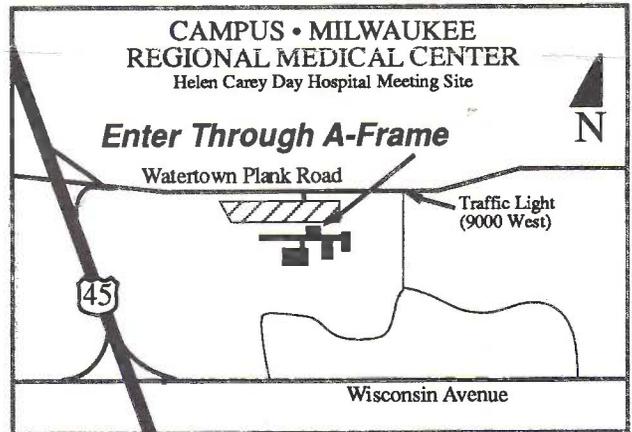
Program/Meeting

Our recent taste of winter weather may have you wishing for the warm nights of summer. But to our speaker this month, Dr. Mary Jane Taylor of the Space Astronomy Lab at U.W. Madison, 10 degrees above zero feels like a heat wave! Dr. Taylor had the opportunity to do her observing at a site where EVERY star is a circumpolar star—the South Pole!

This month, Dr. Taylor will share her experience with us during her talk titled: Stellar Photometry From The South Pole. Dr. Taylor will share the science, the fun and the difficulties of this rare opportunity to visit the south end of the Earth. Bundle up and come out to join us for this interesting program.

Program/Meeting starts at 8 pm, doors open from 7:30 - 8:15 pm only.

-Tom Renner



Calendar of Events

- December 13, Friday 8:00 pm Program-Meeting
Board Meeting at 7:30
 - December 20, FridayDeadline for next Focal Point
 - December 21, SaturdayFull Cold Moon
 - December 22, SundayWinter Solstice 2:54 CST
 - January 1, Wednesday No First Wednesday Meeting
Happy New Year!
 - January 13, Monday MAS Board Meeting
7:30 pm at Richard Wiesen's house
 - January 17, FridayProgram-Meeting
- Saturday Nights—Member night at Observatory—Call key holder

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Library News

At the Wildcat Mt. campout this August, I asked Lee Keith what was next on his observing schedule after he had completed the Herschel list. Without hesitation and with obvious relish he replied, "PLANETARIES!"

Planetary Nebulae by Stephen J. Hynes, 1991, is the latest addition to our library. The Messier list includes several of the brightest of these celestial smoke rings believed to represent the late stages of evolution in a star like our Sun. Successive layers of the star's outer atmosphere expand and escape their gravitational bonds. It was William Herschel who called the objects "planetary" nebulae, because their shape and often greenish hue reminded him of the planet Uranus. He also began to suspect that the nebulae were not aggregates of unresolved stars. Confirmation of that fact came nearly 100 years later when a spectroscope revealed not a continuum, but bright line emission.

Fewer than 100 planetaries were known in 1918, but by 1967 the "Catalog of Galactic Planetary Nebulae" by Perek and Kohoutek contained over 1000 entries. Discoveries continue, particularly in the southern sky; however it is the planetaries outside our galaxy that might some day be used as distance indicators in a manner similar to Cepheid variables.

Hynes discusses current theories of origin and evolution of planetaries, a classification scheme based on form, and types of central stars. There is a chapter devoted to those objects which resemble, but are not, planetary nebulae—a sizeable list. Techniques and tips for amateur observers are included together with some eyepiece drawings. Particularly interesting are comparisons of the view without filter, with a UHC filter, and with an OIII filter*.

The major part of this book is given to a catalog of all the known planetaries through mid-1990 and an indexed atlas of 253 finder charts based on photographic sources. Reference to a star atlas such as Uranometria 2000.0 is also needed; and, mercifully, there is a cross-index of planetaries by name along with their R.A. Extensive references throughout the book will enable further study by advanced amateurs.

*The "magic" of a OIII filter was vividly demonstrated to me, again at Wildcat Mt. I knew I had the right star field, but there was no nebulae to be seen. Lee added the filter to the eyepiece, told me to look again, and that planetary had materialized like a Romulan War Bird!

— Sally Waraczynski



"...the stump of a pipe he held tight in his teeth, and the smoke it encircled his head like a wreath..."

Night (de) Light

Gazing Glance

Soon, the Winter Solstice.

With the coldness—Orion—the crown jewel of the long dark night. In its midst, the Trapezium, a sky-fire in the form of a four-star gem.

Let us enjoy the wonderment while gazing with awe at the splendor that is the Trapezium and the star-studded Hunter.

—Matthew McNeely

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Saturday Nite Keyholders

Dec. 7	Virgil Tagney	327-7976
Dec. 14	Jim Toeller	352-7144
Dec. 21	Richard Wiesen	781-4757
Dec. 28	Paul Borchardt	781-0169
Jan. 4	Wanda Berner	646-8229
Jan. 11	Marty Brunet	544-1342
Jan. 18	Greg Ceslak	529-0548

New Members

The MAS Board recently announced the addition of the following new members. Please make them feel welcome:

Blaine Walulik & Family
- Mukwanago, WI

NCRAL Meeting

There will be a meeting of the NCRAL committee on Wednesday, December 18 at 7:30 pm at Dan Koehler's house. Committee members should plan to attend to further discuss and make decisions for the upcoming convention which promises to be a truly memorable event.

For Sale

Book. Galaxies by Tim Ferris. 13" x 15", Hardcover. 99 color and B&W plates, 182 pages. Like new. \$15.00. Call Erich Schmidt at 282-4497.

Eyepieces. University Optics—all like new. 20mm Erfle, \$35.00; 6.5mm Konig, \$50.00; 3.2mm with built-in barlow excellent for double stars, \$70.00. Call Matthew McNeely @ 354-5347.

1992 NCRAL Update

Last month, we discussed the "who, what, and where" of the 1992 North Central Region of the Astronomical League (NCRAL) Convention. This month, we'll look at what hosting the convention will mean to the MAS, and reveal a few more details about the event.

Have you noticed our "logo" yet?

Below is the 1992 NCRAL Convention logo. The design highlights the talents of creator Martha Kelty. "On a universal tour . . . sharing, learning, growing" is meant to depict the gathering of NCRAL members from around the region each year to share their knowledge about astronomy under the auspices of the AL. Embedded at the center of a barred-spiral galaxy (think of it as the "galaxy" of all U.S. amateurs, or all the amateurs in the Astronomical League) is an outline map of the NCRAL. Within the outline map, the MAS logo

lends itself well in highlighting the exact location of the 1992 convention. The MAS is identified by name at the lower right, with a "slight" reference to our 60th anniversary included. This logo will be used in all outside correspondence relating to the convention, and will appear at the convention in several forms on signs and banners directing participants to various activities at the Country Inn. Tom Gill has offered to design a special "commemorative" T-shirt for sale at the convention. We're thinking that the design could appear in silver on black cloth. What do you think?

How will the convention impact the MAS next spring?

Our normal calendar of events for the month of April will be substantially altered in 1992. For instance, there will be no regular third-Friday-of-the-month membership meeting. The Board of

Directors will meet the first Monday (April 6, 7:30 p.m.) at the Observatory for its regular monthly meeting, rather than the second Monday.

We will not sponsor a Society spring field trip next year. Also, our annual Society banquet for 1992 will take place at the Country Inn (site of the convention) on Saturday evening, April 25. Commencing with the April 25th dinner, the Society's annual banquet will always occur in the month of April each year thereafter. Presumably, at this point, there will be a First Wednesday meeting at the Observatory on April 1.

How are the preparations at the Observatory coming?

The Observatory has truly undergone a transformation this year. Beginning in late May, many projects which went begging for attention for several years have been, or are close to, completion. This includes work on the 25-inch

1992
NCRAL
Convention

On a universal tour...

sharing, learning, growing

Milwaukee Astronomical Society
- our 60th year

1992 NCRAL Update (cont.)

telescope and building. The exteriors of the 'A' and 'B' buildings and the Quonset have been cleaned and painted. So have the the lobby of the 'A' building, the restrooms and darkroom, and the lecture hall.

Painting and staining inside the 25-inch building continue. The interior of the 25-inch dome has a new flat black appearance, and the roof was rebuilt this summer. The 25-inch dome now sports a nearly completed flashing and "skirt" job, and the fascia has been replaced on the building too.

The grounds area around the approach to the new garage (erected during the fall of 1990) has been backfilled and seeded with grass. We owe a debt of gratitude to the many members who donated time and talent to accomplish all of this work during summer and fall of 1991.

Is there more work left to do at the Observatory?

You bet! Remaining painting projects include: the telescope store room in 'A' building, the interior of the 'A' dome (which is now partially finished) as well as the floor and walls, the office and closets in the Quonset, walls on both levels of the 25-inch telescope building, and the floor in the 'B' building.

Hopefully, the exterior of the 25-inch dome will be professional painted before the convention in April. The new flashing and skirt on the 'A' dome will need paint as well.

Work parties will continue throughout the winter as the weather allows. We hope to finish all of this work prior to the convention, however if we fall behind certain projects will take precedent. Any exterior work will be very weather dependent in late March and throughout the month of April.

Introducing the 1992 NCRAL Convention Committee:

Your 1992 NCRAL Convention Committee members are: **Wanda Berner, Lee Keith, Karen Wesener, Jim**

Kube, Dorothy Kube, Tom Gill, Richard Wiesen, Matthew McNeely, Sally Waraczynski, Ken Waraczynski, Martha Kelty, Mary Koehler, and Dan Koehler.

Each member of the committee has a "specialty" or individual segment of convention planning that they are working on, and each person is lending his or her own expertise to overall convention planning. The committee meets every three to four weeks.

Next month, we'll explain who is performing each task, and bring you up-to-date on finer details of the planning process. Our next convention meeting is Wednesday, December 18 at the home of Mary and Dan Koehler. Interested in joining the committee?? It's never too late!

Bits & pieces

Alan Dyer, Assistant Editor of Astronomy and MAS member will be one of three featured speakers at the convention . . . Kalmbach Publishing, publishers of Astronomy and Earth magazines, among others, will host a tour and reception for convention participants on Friday evening at their new headquarters building in Waukesha . . . The convention committee is discussing the prospects of a "silent auction" during the convention of new or "like new" used equipment, astroart, and astrophotos with auction proceeds going to the Astronomical League Trust Fund . . . Anyone for a Sunday morning (April 26) tour at Yerkes Observatory? This is also under consideration . . . The convention banquet will feature three entrees choices: Prime Rib, Bar-B-Que'd Ribs, or Whitefish . . . Registration fees have not yet been set, but will feature discounts for registrations received before mid-March and special low rates for family members . . . Registration materials are not available yet, but will be sent to all MAS members by mail before January 15 . . . Do you have a 1992 calendar yet? Be sure to mark the dates of the convention, April 24 - 25, 1992!



MAS INFORMATION

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