

**STAR FIELDS**

NEWSLETTER OF THE AMATEUR  
TELESCOPE MAKERS OF BOSTON

Vol. 6, No. 3                      March 1995

## Our March Meeting...

Thursday, March 9, 1995  
Phillips Auditorium, Harvard-Smithsonian  
Center for Astrophysics

OUR MARCH speaker is Dr. Margaret Geller, whose talk is "So Many Galaxies... So Little Time". Dr. Geller is professor of Astronomy at Harvard University and senior scientist at the Harvard-Smithsonian Center for Astrophysics.

For more than fifteen years she has worked to map the galactic distribution of the near universe, and has made the most extensive picture of the nearby universe that we have. She has been granted numerous awards, including a MacArthur Foundation Fellowship and the AAAS Newcomb-Cleveland Award. Her professional goal is to discover what the universe looks like and to understand how it came to have the rich patterns we observe today.

Dr. Geller is the author of more than 130 publications covering a range of topics in cosmology. She is also committed to public education in science, frequently giving of herself in public lectures and interviews. She is on the Board of Trustees of the Boston Museum of Science. A true expert in her field, the evening should prove quite informative for those who wonder about the distribution of galaxies in the cosmos.

Please join us at a pre-meeting dinner at the Changsho Restaurant, 1712 Mass. Avenue, Cambridge. Please meet at the restaurant by 6:00 PM.

## President's Message...

AS MARCH and spring are upon us, some of the greatest observing of the year is possible. In March it is possible to do a Messier marathon at the beginning or end of this month, how many are going to try? With the coming spring, my personal favorite part of the sky swings into view, the great realm of galaxies that stretch from Ursa Major down to Virgo. With my 32 incher I plan on as many

"sundown to sunup" nights viewing and photographing these beautiful denizens of the deep. As you gaze upon these stately pinwheels of stars, does it still inspire the awe it once did to realize how far in space and time you are looking? (It does for me!). It is therefore appropriate that we have as our guest speaker this month Dr. Margaret Geller, who is mapping out the three dimensional distribution of these galaxies. (If I had stayed in Astronomy instead of medicine, this is exactly the type of research I wanted to do!)

We have many fine telescope makers and observers in our club, but a number of us have become "armchair" astronomers. As a boost to the observers and a source of inspiration to the others I would like to set aside 5-10 minutes of every meeting so that photos, CCD images, or a quick report of a new observational tool or telescope can be shared with all. I wish to do this because as a club we do not promote the immense talent within the club enough. So if you have taken a great photo, let me know so that I can schedule you into the meeting: I am anxious to see your work. Again, I hope this new feature of the club will support the fine work of members, and inspire the rest.

- Mario Motta

## Messier Marathon...

SO, YOU think a 26 mile road race from Hopkinton to Boston sounds challenging? How about a dusk to dawn sprint across millions of light years as you round up 110 of the best deep sky objects going? That's what a Messier Marathon is all about and this is the month to go for it! The Moon is new late on the 30th so this years' marathon will be conducted at the clubhouse on Friday March 31st, with a cloud date of April 1st. (You could even try to better your score if both nights are clear! Remember though, we "spring ahead" that night and "lose" an hour of observing, er, I mean sleeping afterwards!)

### What to Expect

Be prepared to begin as soon as darkness falls because M74 and M77 set early! The many galactic clusters of the Winter skies give way to the galaxies of Spring. It's a tough grind through the Coma-Virgo area around midnight but rest for only a moment for the pace quickens! Globular clusters dot the sky as you work your way towards the Summer Milky Way during the pre-dawn hours! Cygnus, Aquila, Scutum, and Sagittarius; For many, this is the "Heartbreak Hill" of the Marathon! M30 in Capricornus usually rounds out the long night as twilight intensifies!

### Nifty Certificates

The Astronomical League awards certificates to those who've observed 70 or more of these objects. The names of those achieving this goal will be submitted to the Astronomical League for proper recognition!

Interested?? If so, join us for this year's Messier Marathon! Dress warmly and bring snacks (For carbo loading!). For more information contact me at (508) 879-3498 or Steve Mock at (617) 625-5870.

-Rich Nugent

## 1998 Eclipse Trip...

1998 ECLIPSE in Aruba: Our club will sponsor an eclipse expedition to Aruba for the Feb. 26 1998 total eclipse of the sun. We have arranged to reserve 100 rooms at an all suites beach front hotel for 8 days/7 nights, with a charter direct nonstop flight. (will include air, hotel, transfers, taxes, and transport to the eclipse site. An optional meal plan will be offered). As all rooms are suites, entire families can be in one suite, lowering total costs. Reservations can now be made for a nonrefundable \$50 person/ or \$100 max. per family, on a first come basis. (Family is defined as 2 adults plus their children). Firm prices will not be locked in until 1 year in advance, but are estimated to be in the \$1200 range in current prices (with a discount for children in same room as parents). The club will earn funds from this expedition, and spaces are open to club and non club members. A brochure will be sent to all club members in the near future, or write to: Travel Services Group, PO Box 250, Somerville, Mass., 02145., or call 617-396-1748.

## Announcements...

IS THERE an accountant in the club who could volunteer to do a yearly audit of the club? (It does not have to be done during tax season). Please contact me, Mario Motta.

VOLUNTEERS ARE still needed to help with Astronomy Day '95 activities! The event will take place May 6th at the Boston Museum of Science. We need folks to man the display tables and to help out at the star party to be held that evening. Any H-alpha people interested in setting up during the day? The evening event usually draws a crowd, so the more scopes the better! Even if you don't own a 'scope, you can help by pointing out the various constellations, bright stars, and planets. If you plan to attend, please call me at (508) 879-3498. - Rich Nugent

THE KILLIM School Star Party has been rescheduled for March 28 in North Reading, Rain date March 30.

## Clubhouse News...

THE NEXT clubhouse committee meeting will be held March 11, 1995 at 6:00PM. The agenda includes next year

(1996) projects and proposed 1995-1996 budget. Committee members, please mark your calendars.

SPECIAL THANKS to Joseph Szalla of North Dartmouth, MA. for donating 75 half-windows and 20 full storm windows to the clubhouse. Mr. Szalla is Paul Cicchetti's father-in-law.

THE ASTRONOMICAL Society of New England will be coming from Kennebunkport, ME to visit the clubhouse on March 24, 1995. Why not show up and welcome our fellow amateurs?.

WORK IS progressing on the new kitchen, with hopes it will be finished in time for the March 24th visit by the Astronomical Society of New England..

THE BOSTON Junior Chamber of Commerce star party is scheduled for March 4, at the clubhouse. Volunteers are needed. If you can lend a hand, please be at the clubhouse at 4:00PM.

### CLUBHOUSE DUTY ROSTER

March 4:	Dave Aucoin	617-891-9650
	Steve Mock	617-625-5870
Mar. 11:	Bernie Volz	508-881-3614
	John Reed	617-861-8031
Mar. 18:	Phil Rounsville	617-527-1080
	Bob Collara	617-275-9482
Mar. 25:	Bob Heller	508-433-6536
	Paul Cicchetti	508-433-9215
Apr. 1:	Steve Clougherty	617-784-3024
	Eric Johansson	508-667-0137

## Keep Looking Up...

JUPITER ECLIPSES Ganymede twice this month. The first event begins March 23 at 1:31AM (EST). While the second starts March 30th at 5:28 AM (EST). Details can be found in the March issues of *Astronomy* magazine. Jupiter rises around midnight at month's end.

MERCURY, SATURN, Venus and the moon are at conjunction twenty minutes before sunrise on March 28. Mercury and Venus will be close to the horizon so look carefully for them in the twilight.

BE THE first in the club to spot the young crescent moon. This is the time of the year when it is best positioned for early optical capture. The moon is new on March 30, at 21:09 EST so the hunt for the young moon

starts right after sunset on March 31. Please note this is also the same day of the clubhouse's messier marathon so as long as you're at the clubhouse, you may as well look for it. Please phone me, Steve Beckwith, with the time you observed the crescent moon, the equipment used and from what location. I'll publish the earliest times and names in the next issue of *Star Fields*.

MARS REACHED opposition last month and though it's angular size is now decreasing as it moves away from the Earth, expect some decent viewing of the red planet for the next few months.

ON MARCH 3rd, the Russian satellite Cosmos 1867 begins a 10-day series of favorable evening passes across North America; it should be easily visible to the naked eye. See the March *Sky & Telescope*, page 72, for times to look.

## A Look at Leo...

LEO THE Lion strides towards the meridian this month and is well positioned for some deep sky viewing.

### Views From the Past

According to the ancient Greeks, Leo met his end when Hercules strangled him when completing the first of his Twelve Labors. According to legend, Hercules used Leo's hide as a cloak. The early Egyptians had a completely different view of this constellation, which they worshipped. The sun entering Leo signaled the end of the flood season along the Nile and better weather to come. It is widely believed there is an association between Leo and the Great Sphinx of Egypt. Indeed, some have speculated that the Sphinx is actually the head of Virgo on the body of Leo.

Persian mythology viewed Regulus, Leo's first magnitude star, as one of the four Guardian stars to heaven. The three other stars are Fomalhaut, Aldebaran and Antares.

### What's in a Name?

The name Regulus means "Little King" and was given to  $\alpha$  Leonis by Copernicus. Shining at 1.4 magnitude, it is the heart of Leo and is located at the base of the "sickle" that is the head of the lion. It is 91 light years distant and the 21st brightest star in the earth's skies.

### Break Out the Optics!

Eight degrees northeast of Regulus is  $\gamma$  Leonis, a superb binary with a 3 arc second separation between the magnitudes 2.2 and 3.5 components. Smaller aperture telescopes may have trouble splitting this binary but observing in moonlight or twilight will reduce the glare of the two components and make resolving them easier. Note the color, most references describe the two components as yellow while some - W.T. Olcott's & E.W. Putnam's *Field*

*Book of the Skies*- have described the fainter star as greenish. What color's do you see?

If you're up for a real challenge, try tracking down 13.5 magnitude, Wolf 359. This faint red dwarf is located near VY Leonis at 10h 54.1m ,7°19'. It is 7.75 light years away and is the third known closest star to the Earth.

### For Those Moonless Nights

For the deep sky observer, there are several galaxies to spend some observing time on. Nine degrees east of Regulus are M95 (mag. 9.7), M96 (mag. 9.9) and M105 (mag. 9.3). M95 is a barred spiral while M96 is a regular spiral. M105 is an elliptical galaxy. A low-power eyepiece will place all three objects in the same field of view (Messier marathoners take note!).

Halfway between  $\theta$  and  $\iota$  Leonis are the spiral galaxies M65 and M66 shining at mag. 9.0 and 9.3 respectively. The two objects are 21 arc seconds apart and can be observed in the same field of view. You may also spot two other spiral galaxies near by, NGC 3628 and NGC 3593.

Another fine galaxy, NGC 1903, concludes our tour of Leo. It is a large spiral located near the head of Leo, about 1.5 degrees south of  $\lambda$  Leonis.

## FOR SALE...

HUGE COLOR slide collection of galaxies, Saturn from Voyager, Mars Viking, Apollo missions and planets from space; with "Landing on Mars" and "Man on the Moon" videos, giant photo poster of the Messier objects and seven tremendous full color books on Pioneer Jupiter, space shuttles, Skylab, Earth. (508)-670-2913 evenings.

- Rich Burwen

## Coming Events...

Mar. 16 CFA MONTHLY OBSERVING NIGHTS. "A Brief, Bright Pattern: Beatrice Tinsley and the Evolution of Galaxies" by Joann Eisberg, University of California, Santa Barbara. 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information.

Mar. 24 MONTHLY FRIDAY OBSERVING at the clubhouse, 8:00PM-9:00PM. In case of questionable weather, contact Ed Los at 603-884-1586 (home) or 603-884-1586 (work).

April 20 CFA MONTHLY OBSERVING NIGHTS. "Dust in the Corners of the Universe" by Alyssa Goodman. CFA.. 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information.

**EXECUTIVE BOARD 1994-95**

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Paul Cicchetti 508-433-9215  
**OBSERVING:** Richard Nugent 508-879-3498  
**HISTORIAN:** Anna Hillier 617-861-8338

**APRIL STAR FIELDS DEADLINE**

March 31st is the deadline for items to be included in the April issue of *Star Fields*. Mail or phone your contributions to: Steve Beckwith, 195 Wilder Road, Bolton MA. 01740 508-779-5227  
e-mail: [Compuserver@71762,2513](mailto:Compuserver@71762,2513)

**How to Find Us...**

**MEETINGS:** Held the second Thursday of each month (September to July) at 8:00PM in Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA.

**CLUBHOUSE:** The Tom Britton Clubhouse is open every Saturday from mid-afternoon to late evening. It is the white farmhouse on the grounds of MIT's Haystack Observatory in Westford, MA. Take Rt. 3 North from Rt. 128 or Rt. 495 to exit 33 and proceed West on Rt. 40 for five miles. Turn right at the MIT Lincoln Lab. Haystack Observing at the Groton town line. Proceed to the farm house on the left side of the road. Since clubhouse attendance varies with the weather, it is wise to call in advance: 508-692-8708.

**Amateur Telescope Makers of Boston**

**FIRST CLASS**