



STAR FIELDS

Newsletter of the Amateur Telescope Makers of Boston
Including the Bond Astronomical Club
Established in 1934
In the Interest of Telescope Making & Using

Vol. 12, No. 10 November 2001

This Month's Meeting...

Thursday, November 8th, 2001, at 8:00 PM
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

This Month's Speaker...

OUR GUEST speaker will be Fred Baganoff, research scientist at MIT. Dr. Baganoff is using Chandra and its ACIS instrument (Advanced CCD Imaging Spectrometer) to observe the center of our Galaxy in order to study the X-ray emissions from Sagittarius A*, the compact radio source associated with the supermassive black hole at the dynamical center of the Milky Way. The title of his talk will be "Unveiling the Galactic Center with the Chandra X-ray Observatory."

Dr. Baganoff received his B.S. in physics from the University of Missouri, Rolla and his M.S. and Ph.D. in astronomy from the University of California, Los Angeles (UCLA). For his dissertation, he monitored the variability of quasars and active galactic nuclei in the radio, optical, ultraviolet, and X-ray wavebands. He graduated from UCLA in 1996 and took a postdoctoral research position with the ACIS instrument team at the MIT Center for Space Research. For the three years prior to the launch of Chandra in 1999, he worked on the calibration of ACIS and planning for the orbital activation and check out procedures.

Join us for dinner at 5:45 PM at the Changsho Restaurant located at 1712 Mass Ave. in our fair city, Cambridge.

President's Message...

EILEEN, YOUR well-planned bus trip to the Rose Center in New York City was a success! It was another fabulous trip organized and executed by you. I would like to thank you for all the effort and hard work you have generously contributed. We all hope you will consider doing it again.

We are beginning to make plans for a club trip to Baxter State Park next summer. In the past, this trip has included very long nights of observing in dark skies and days filled with hiking or lounging. Baxter is a very dark site and the observing there can be

spectacular! We plan to reserve the Nasstehunk camping area for 10 days so that members will have the option to sign up for the number of nights convenient for them. We will offer our club members first choice, and if we cannot fill the minimum required number of campers by Memorial Day we will open vacancies to other clubs. If all goes well, our club should break even or make a small profit.

-Bob Collara, President-

Executive Board Meeting...

THE EXECUTIVE BOARD met on October 21 at the clubhouse. We discussed having a club camping trip at Baxter State Park in Maine. We would reserve 10 nights, consisting of two weekends and the week in between. The cost would be \$3 per person per night. Drivers will need to pay \$8 at the gate for a car permit. Twenty-five people will need to sign up. The cancellation date for having the trip will be Memorial Day. Campers will bring their own food. There are plans for a \$5 Saturday night dinner on the last Saturday. Club commitment must be made by January 1. We will invite other clubs if necessary. Campers can hike or rest during the day, observe at night. (Latest info from trip coordinator STEVE MOCK: Email steve-mock@excite.com Money must be in by December 10th. Reservations will be made December 15th. The dates will be around Wednesday, July 3rd thru Monday, July 14th, or Thursday, August 1st thru Monday, August 12th, whichever set of dates the majority favors. New Moon occurs on Wednesday, July 10th and Thursday, August 8th.)

There are some old windows that need to be disposed of. The wood can be dumped, but not the glass. Does anyone want old windowpanes to make a greenhouse?

A backhoe will be needed for 5+ hours to dig trenches for power/data for the new observatory, and for a gravity drain for the basement.

The club will purchase a Mosquito Magnet to reduce the number of mosquitoes in the observing areas. It will be placed according to the manufacturer's directions to obtain the most effective results for both the observing field and the area around the new observatory. The club will match donations to pay for the cost. Bruce Berger will coordinate the matching fund.

The proposed clubhouse budget was modified and approved. Money to cover the cost of materials was allotted to Mario Motta to erect an Honor Roll Plaque with 25 honoree names.

-Eileen Myers, Secretary-

September's Minutes...

PRESIDENT BOB COLLARA opened the 741st meeting of the Amateur Telescope Makers of Boston, including the Bond Astronomical Club. OUR GUEST speaker was Dr. Bryan Gaensler of the CfA. He explained that a star like the Sun can only generate the elements up to iron. It takes the extreme pressure and heat of a super nova explosion to slam atoms together and create all of the heavy elements (gold, uranium, lead, etc.). Chandra can work out in a super nova which elements are where. It was expected that a super nova would swirl out the elements in nice layers, like the layers of an onion, with lead on the inside and the lighter elements on the outside. Chandra, however, found all of the iron around the edges of the super nova. When a super nova goes off there is turbulence and mixing, so all of the elements get "frothed up". It is not homogenous.

At the business meeting club officers gave their reports. There are now 363 club members. PETER TEAGUE informed us that a group of ATMob members and members of other astronomy clubs made a bulk purchase of green laser pointers from Howie Glatter, who gave them a great discount. The club thanked JAMES W. BALES, DR. JONATHAN B. GREENBERG, HOWARD A. LEVAUX, TODD A. RYAN, and PETER TEAGUE, who all decided to donate the leftover funds collected for the purchase to the club. TAL MENTALL distributed a list of email addresses (taken from *S&T* May '97 pg. 97) of astrophotographers who have samples of their images and astroimaging tips on the Internet. (See club secretary for a copy.) JOSEPH ROTHCHILD reminded everyone to watch the Leonid meteor shower, particularly on the morning of Sunday, Nov. 18th.

BERNIE VOLZ again announced the November 13th dinner to honor ED KNIGHT. EILEEN MYERS made a final announcement for the trip to visit the Rose Center for Earth and Space and the Hayden Planetarium in NYC on October 20th. Slides taken by DICK KOOLISH of club members KEN LAUNIE, HUGO LOGEMANN, ED WALLNER, and Dr. Owen Gingerich (Professor of the History of Science at Harvard) were shown. This group of antique telescope restorers took on the project of cleaning the lens of the 15" Great Refractor of the Harvard College Observatory. The 15" diameter lens was made by Merz and Mahler of Munich. Harvard College and the date March 15, 1846 were carved into the side of the lens. Sometime before, ED KNIGHT had already fixed the unique observing chair that rolls around the telescope on circular tracks. One of the many significant observations made with the telescope was the discovery in 1848 of the eighth satellite of Saturn by W.C. Bond and his son, George P. Bond.

-Eileen Myers, Secretary-

Membership Report...

PLEASE GIVE a warm ATMob welcome to this month's new members: DAVID FRIED from Needham and GLENN MEURER from Westford.

I still look forward to hearing from anyone interested in taking over the membership position next year so that there is a smooth transition.

There are about 100 folks who still need to pay their dues.

-John Small, Membership Secretary-

Upcoming Star Parties...

THERE WILL be star parties in Marlboro on November 5th and 7th. These are two nights of observing to help distribute the crowds. STEVE SARGENT tells me that the first night will be the more crowded of the two. Steve needs lots of help for these.

-Rich Nugent, Observing Committee-

THE LYNNFIELD star party has been rescheduled for Monday, November 19th, with an auditorium lecture at 6:30, and observing starting at 7:15 in the field behind the Middle School. I will send an announce with the directions a few days before the event. Please e-mail me at mmotta@massmed.org if you can make this event. I anticipate approximately 300 people, so I will need about 8-10 volunteers.

-Mario Motta-

Treasurer's Report...

FOR THE month of September, we had \$976.65 in revenue and \$562.94 in expenses for a net income of \$413.71 for the month.

As of September 30th, 2001 our assets were:

Checking Account - Regular	\$ 19,223.95
Investments	\$ 19,006.66
Total Current Assets	\$ 38,230.61

Of the total, \$2,567.61 is in the Land Fund and \$155.00 is for clubhouse key deposits.

-Bernie Volz, Treasurer-

Clubhouse Report...

SATURDAY OPEN CLUBHOUSE SCHEDULE

November 3		Work Party # 10
November 3	Dan Feldkhun	John Small
November 10	Richard Burrier	Henry Hopkinson
November 17	Bruce Berger	Eileen Myers
November 24	Bruce Gerhard	John Reed
December 1	Steve Mock	Gary Walker
December 8	Eric Johansson	Al Mazurka
December 15	Jack Drobot	Lew Gramer
December 22	Steve Clougherty	Tom Wolf
December 29		Work Party #11
December 29	Bruce Berger	Bruce Gerhard

THE RAIN threatened early on Saturday, October 6th. Over a dozen members moved 5.86 tons of debris into the 30-cubic-yard BFI dumpster, which was later removed on October 9th. The grass was trimmed, grounds raked, and grass seed planted. Working around the October 13th trip to Astro Assembly and the October 20th trip to NYC (to visit the Rose Center for Earth and Space and the Hayden Planetarium), the furnace installation was completed and inspected, thanks to ED KNIGHT. DAVE PROWTEN now has our total support in his effort to finish the observatory roof. The roll-off feature will be tackled later after the structure is built to seal out the winter weather. Our **next work party on November 3rd** will continue this effort, as well as brush removal and chipping, and filling low spots around the driveway with the road sand sweepings donated for that service. This will also help with mosquito control for next year.

Part of the thought process in giving and future accepting of large items at the clubhouse must be the removal cost at the end of the item's useful life. This last cleanup and throwout cost over \$700, and many person-hours of volunteer labor. A great big Thank You to all who participated. You make the clubhouse possible.

-John Reed, Clubhouse Director-

Ed Knight Roast...

THIS IS a reminder to all members of the ATMob that a special Dinner Roast for ED KNIGHT will occur at the ChangSho Restaurant in Cambridge at 6:30 PM on Tuesday, November 13th. Come show your appreciation of Ed for his 50 years of service to our organization. Please email me for details at mmotta@massmed.org. My phone number is listed on the back of the newsletter.

-Mario Motta-

Club Email Gets Easier...

LEW GRAMER has created a suite of email aliases that can be used to reach a member of the Executive Board or a Committee without needing to know the actual email address. They are president, vicepresident, treasurer, secretary, newsletter, membership, membersatlarge, observing, starparty, starparties, clubhouse, librarian, historian, and officers: president, vicepresident, treasurer, secretary, membership, membersatlarge. Example: president@atmob.org would send email to club President Bob Collara.
-Eileen Myers, Secretary-

Trip to Hayden Planetarium...

THIRTY-FIVE members/family/friends went on the bus trip to visit the Hayden Planetarium and Museum of Natural History in NYC on October 20th. One of our Planetarium tour guides not only gave us our pre-arranged 45-minute tour, but also spent two more hours touring the fossil exhibits of the Museum with us. Several from our group made a quick visit to Ground Zero. The food and ambiance at Gabriella's Kitchen was wonderful. After taking photos of the Planetarium at night, we walked past the enchanting Tavern-On-The-Green to get to the star party in Central Park. The Moon, Mars, Neptune, Double Cluster, and the Andromeda Galaxy were observed through telescopes. The evening and the skyline surrounding Sheep Meadow were magnificent. We watched many sci-fi movies on the bus. Everyone had a great time.
-Eileen Myers-



Photo by David Prowten



Cartoons by George Foster



"Well...I never"

December Star Fields deadline is SUNDAY, December 1st
Email articles to Star Fields Editor / ATMOb Secretary
Eileen Myers at starleen@charter.net
Articles from members are always welcome.

POSTMASTER NOTE: First Class Postage Mailed November 2, 2001

Amateur Telescope Makers of Boston, Inc.
c/o John Small, Membership Secretary
9 Bear Hill Terrace
Westford MA 01886-4225

FIRST CLASS

EXECUTIVE BOARD 2001-2002

PRESIDENT:	Bob Collara	day (978) 284-5812 eve (781) 275-9482
VICE PRES:	Steve Hertzberg	(617) 965-2858
SECRETARY:	Eileen Myers	day (978) 461-1450 x0 eve (978) 456-3937
MEMBERSHIP:	John Small	day (617) 484-2780 x119 eve (978) 692-8938
TREASURER:	Bernie Volz	(508) 881-3614
MEMBERS AT LARGE:		
	Bruce Berger	(978) 256-9208
	Steve Clougherty	(781) 784-3024
PAST PRESIDENTS:		
1998-00	Joseph Rothchild	(617) 964-6626
1996-98	Peter Bealo	(603) 382-7039
1994-96	Mario Motta	(781) 334-3648

COMMITTEES

CLUBHOUSE DIRS:	Paul Cicchetti	(978) 433-9215
	John Reed	(781) 861-8031
	Steven Clougherty	(781) 784-3024
HISTORIAN:	Anna Hillier	(781) 861-8338
OBSERVING:	Richard Nugent	(508) 879-3498

How to Find Us...Web Page www.atmob.org

MEETINGS: Held the second Thursday of each month (September to July) at 8:00PM in the Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA. For INCLEMENT WEATHER CANCELLATION listen to WBZ (1030 AM)

CLUBHOUSE: Latitude 42° 36.5' N Longitude 71° 29.8' W

The Tom Britton Clubhouse is open every Saturday from 7 p.m. 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 Observatory at the Groton town line. Proceed to the farmhouse on left side of the road. Clubhouse attendance varies with the weather. It is wise to call in advance: (978) 692-8708.

Heads Up For November...

Eastern Daylight (Savings) Time - Subtract 5 from UT to get EDT

Milky Way spans the sky symmetrically from east to west.
Sat Nov 3 – S Taurid meteors peak at 9PM EST 10/hr at zenith 28 km/s, associated with Comet 2P/Encke.
Tue Nov 13 – N Taurid meteors peak at 8PM EST 15/hr at zenith 29 km/s, associated with Comet 2P/Encke.
Sun Nov 18 - Leonid meteor shower (dust from Comet Tempel-Tuttle), rates predicted at 15,000 when radiant is at the zenith. 2 possible peaks at 5AM EST (1000/hr) and at 1 PM EST (daytime) (10,000/hr), 71 km/s. The Leonid radiant in the “Head” or “Sickle” asterism of Leo is only on view after 23h-00h. The Leonids approach the Earth virtually head-on, extremely swift, often bright, and 50-70% leave persistent trains.
Tues Nov 20 – Neptune 3° N of the Moon
Wed Nov 21 – Mars 3°N of the Moon; Uranus 4° N of the Moon.
Double shadow transits on Jupiter: Sat Nov 3 at 1:20 AM EST, Mon Nov 5 at 9:29 PM EST; Sat Nov 10 at 3:56 AM EST; Wed Nov 21 at 7:50 PM EST.
Sat Dec 1 Full Moon, Moon 0.51° NW of Saturn (mag -.4), occultation at 9PM EST.