



### **OUR SEPTEMBER MEETING...**

Thursday, September 10, 1992, 8 p.m.  
Phillips Auditorium, Harvard-Smithsonian  
Center for Astrophysics

**THE BIRTH OF THE COSMOS** is the subject of this month's talk by Dr. Alan Guth, Jerrold Zacharias Professor of Physics at MIT. Dr. Guth is a cosmologist known world wide for the inflationary model of the big bang theory that he proposed in 1980. According to Guth's theory, the universe underwent a period of rapid, inflationary expansion when it was between  $10^{-35}$  and  $10^{-32}$  seconds old. During this time, says Guth, the universe increased in size by a factor of  $10^{25}$  or more. Why such an inflationary expansion should have taken place, and why it is important will undoubtedly be covered by Dr. Guth's talk.

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Join us for a 5:45 p.m. pre-meeting dinner with our speaker at the Changsho restaurant, 1712 Mass Avenue, Cambridge.

### **JULY MEETING HIGHLIGHTS...**

The meeting was opened by our new president, Bernie Voiz, with nearly 50 members and guests in attendance. The usual reports were presented with Peter Bealo substituting for Tony Costanzo and Phil Rounesville for Greg Chase. The amendments to Article VIII and IX were passed by more than two-third of the membership present. The amendment to Article V is to be modified per a suggestion of Ed Los and republished. Ed, as out going Membership Secretary, also made available a final financial report of the membership account. Steve Mock asked the Executive Board to address the problem of access to the clubhouse and its growing unkempt condition. The president briefly presented some of his thoughts on future meeting programs and asked to hear from members about their ideas in this regard. Glenn Chapple, ATM'er and columnist for Odyssey magazine, made available a list of the "Finest Double Stars of Spring" and indicated that the magazine is live and well under its new ownership. John Reed announced that one of younger members, Tim Solinski, who

contributed substantially to clubhouse and other club activities has left the area to continue his education in Michigan.

Ed Los lead off July's Show and Tell with a talk and slides about behind the scenes activities at the McAuliff Planetarium. A video showing the building of the observatory for the 13.5-inch Schupmann in Springfield, VT was presented by Scott Milligan. Ed Wallner showed slides of the ancient observatories of India. Another video was shown by Ed Dougherty that detailed the present state of our 20-inch telescope. Mario Motta detailed, the honeycombing, grinding and polishing of his 32-inch mirror with a series of slides. Kevin McCarthy went through the design considerations he entertained before deciding upon the Dall-Kirkham configuration for his 27-inch mirror. Using modern scientific info and calculations, Ted Kochanski proved that Hipparchus was right in pegging 6th magnitude as the visual limit. Finally, Bernie Voiz showed slides of the "almost seen" solar eclipse he went to Uruguay to view.

### **THINGS YOU MAY WANT TO KNOW...**

**STELLAFANE '92.** According to John Reed, this annual convention was as great as always, and he identified at least a dozen or so ATM'ers attending. ATMob member, Dan Feldkhun, won second place in optics for his 8-inch reflector. Although it rained on Friday, it cleared out for good observing on Saturday night. Two humongous scopes attracted great attention. One a 12-inch, f/15 refractor (owned by Paul Calantropo) and a 32-inch Dobsonian that gave views of M13 that would make you "wet your pants." The featured speaker was Dr. Robert Jastrow who talked about the revitalization of Mt. Wilson Observatory.

**YOUR MEMBERSHIP RENEWAL** was due by July 31. If you have failed to renew your membership, please do so NOW! See the June issue of *STAR FIELDS* and use the renewal form published there or simply send your check for \$37 (dues plus S&T subscription) or \$17 (without S&T) to JOHN SAMOLYK, 65 Court St., Medford, MA 02155.

**GOOD LUCK MARS OBSERVER!** Between September 16 and October 6, NASA plans to launch the first space probe to Mars in 17 years. It will reach its destination in late August of 1993 and begin its two-year mapping mission by mid-December 1993. For more details, see *Astronomy*, September 1992 issue and S&T, October 1992.

**ASTRO ASSEMBLY '92**, always a relaxed and fun amateur gathering, is scheduled for October 2 & 3 at the Seagrave Memorial Observatory, 47 Peepoad Rd, North Scituate, RI. As usual it will feature a swap table, speakers, telescope and astrophotography competitions, door prizes, and a Dinner Buffet on Saturday night. "Star Spots and Tomorrow's Weather" will be the featured presentation by Brian Skiff of the Lowell

Observatory. Registration \$10 (\$12 after Sept. 15), Banquet \$16. For more info, contact Conrad Cardano, 68 Covintown Rd., Coventry, RI 02816, 401-828-0702.

### **OBSERVING & SHOP COMMITTEES...**

If our clubhouse and its observing facilities are to continue to be available for use, the Executive Board feels that the Observing and Shop Committees must become real committees with not just a chairman, but additional committee members. The Executive Board, Ed Dougherty (Observing Committee Chairman), and Greg Chase (current Shop Committee Chairman) are working to prepare a list of committee responsibilities and functions. The responsibilities of these committees should be shared among 4-6 people for each committee. This means that members who feel clubhouse facilities must be preserved must also volunteer to serve on these committees. Yes, it will take a few hours of your time each month, but without the support of the members, there would be no club (we have NO paid positions - everyone must volunteer). We need everyone in the club to help out and actively participate!

--Bernie Volz

**OBSERVING COMMITTEE NEEDED.** Three or four reliable, responsible, volunteers are needed to expand the Observing Committee and to coordinate all ATMoB observing activities and to operate and maintain the clubs observing facilities and telescopes. The committee will develop and implement, policy, budgets, and rules governing the security, access, use and operation as required. See me at the our monthly meeting or call me at 508-458-8857 for more information.

--Ed Dougherty

**SHOP COMMITTEE AND COMMITTEE CHAIRMAN NEEDED.** Greg Chase, Shop Committee Chairman since 1987, has decided to step down as chairman, but will continue to serve as a committee member. Greg has done an excellent job as chairman. He kept the clubhouse maintained and running smoothly over the past five years. On behalf of the entire club membership, I thank Greg for his extraordinary contributions. We are also happy that his experience will still be available to the committee.

We now need a chairperson and committee members

for the Shop Committee. This committee is responsible for coordinating all ATMoB clubhouse activities, its maintenance, and use of its facilities. Please contact me to serve on this committee.

--Bernie Volz

### **ATMoB ACTIVITIES...**

THANKS TO KEVIN McCARTHY members who attended the July meeting were treated to a large tray of homemade Baklava. Unfortunately, life is not always fair because Kevin sustained a nasty (two stitch) gash to his forehead while loading his car at the end of the meeting.

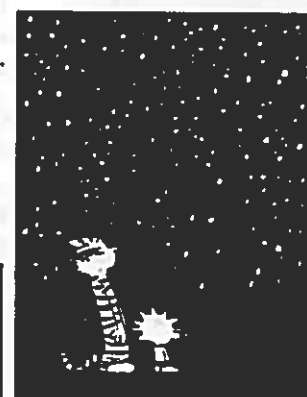
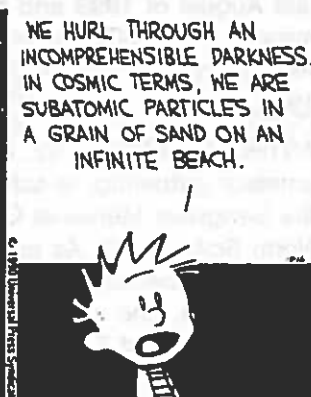
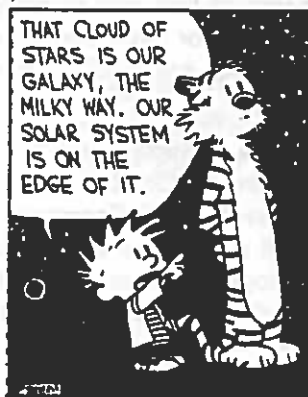
PETER BEALO posted at the July meeting three beautiful photos of the lunar eclipse of June 15. He, like most members showing astrophotos neglected, however, to indicate the type of film, its ISO rating and exposure time. This info might be useful to budding astrophotographers.

AN ATMoB EXECUTIVE BOARD MEETING was held on Saturday, July 18 at 7 p.m. at the clubhouse. All board members except one were present. The board voted to continue our membership in the Astronomical League and to purchase the AL liability insurance. It voted to sell the clubhouse computer to a member for \$200 and to establish a monthly 50/50 Raffle at our meetings to raise funds for future land acquisition or other capital expenditure. A refreshment committee for our monthly meetings was set up with a different chairperson each month selected from the Executive Board. The chairperson will ask one or more members to assist. The many problems centering around the clubhouse were discussed at length and it was decided that they will be solved by essentially expanding the Observing and Shop committees size and responsibilities.

A SPACE WEEK STAR PARTY in July, organized in cooperation with the Hayden Planetarium, was clouded out both nights. Nevertheless, a thank you is extended to those 10 members who signed up to take part and particularly to the couple of individuals who actually drove to the museum.

MEMBER CLUBHOUSE DONATIONS recently included a 21-inch RCA TV from DANIEL FELDKHUN and a pump from LARRY MOSS that can be used on our recently acquired vacuum evaporator. Thank you both.

### **CALVIN AND HOBBS** By Bill Watterson



SPECIAL THANKS to David Aucoin for spending several long days cleaning up the clubhouse! It was in need of cleaning and Dave did a lot to get it back into shape. Thanks Dave!  
-- Ed Dougherty & Bernie Volz

A MONTHLY RAFFLE will be held, starting with our September meeting, for a special ATMoB land and capital equipment expenditure fund. Each ticket is \$1.00 and the raffle is a 50/50 one, with 50% of the money going to the special fund and the other 50% going to the winner. All proceeds from this raffle are to be used to raise money for some future large expenditures, such as a land purchase. The fund will not be used for general operating expenses.

-- Peter Bealo

### ***A CLUBHOUSE TRIPLE EVENT...***

Saturday, September 19th, is a triple event day at the clubhouse! First of all, its a cleanup and paint day. All members are asked to give a hand in painting the outside of the clubhouse, cleaning up the inside, or doing other general repairs. Please bring any equipment that you can (paint brushes/rollers, spray guns, ladders, scrappers, ...). We'll begin sharply at 10 a.m. and work through the day. Bring food and drinks and we'll have a picnic lunch and dinner. In case of rain, we'll reschedule this event for sometime in October. Any questions? Call Bernie Volz, 508-881-3614.

Secondly, during the evening we are conducting a star party for the Appalachian Mountain Club at the clubhouse. The star party will consist of one or two presentations followed by observing (weather permitting). This event will be held rain or shine. Club members are needed! Please attend. For additional details, contact Ed Dougherty, 508-458-8857.

Finally, the 19th is our usual ATMoB monthly observing night. So don't forget your telescopes and use the opportunity to do some observing that night and introduce our guests to the wonders of the night sky.

### ***ATMoB BYLAW AMENDMENTS...***

The following amendments to the ATMoB Bylaws will be voted on at our September meeting:

Article V, Section 3: Membership Dues: ...Upon receipt by the Membership Secretary of payment in full of the dues owed by a Regular Member for the current fiscal year of the corporation plus any fees for optional publications, application shall be made to the appropriate publications for subscriptions in the name of such member. Payment for all such subscriptions shall be made by the Membership Secretary from the funds of the corporation.

Article IX, Committees, Section 1, Permanent Committees: There shall be two permanent committees of the corporation as follows: Clubhouse Committee and Observing Committee.

### ***NEW MEMBERS...***

We welcome the following amateur astronomers as new members of the ATMoB:

Victor E.A. Anderson	Framingham, MA
Joseph J. Burbage	Townsend, MA
Robert H. Heller	Pepperell, MA
Paul R. Hunt	Millbury, MA
Daniel L. Schodek	Winchester, MA
David Shelton	Amherst, NH
Howard Tarko	Newton, MA
J. Morris Weinberg	Cambridge, MA

### ***IT'S ASTONISHING...***

Look at the earth for a moment...through the eyes of an astronomer. It is an insignificant ball of rock circling a very ordinary star located about two-thirds of the way out in the spiral arms of a very ordinary galaxy. This galaxy is one of hundreds in a supercluster of galaxies, and even the supercluster is only one of many in a universe that stretches billions of light-years in every direction. And yet, on that insignificant ball of rock the descendants of hominids that came down from the trees in Africa a few million years ago are able to discover the laws that make the whole marvelous machine work. If that's not astonishing, I don't know what is!  
--James Trefil, "Reading the Mind of God", Charles Scribner's Sons, NY 1989

### ***ASTRO-TRIVIA...***

YOU CAN UNDERSTAND the connection between the microwave radiation and the Big Bang by imagining a fire in a fireplace. After the flames stop, the coals are bright orange. As time goes by, the color fades to a dull red and finally disappears. But even after the coals have stopped glowing, they are still giving off heat, as you can verify by holding your hand to them. We interpret these observations by saying that hot objects give off radiation, and as a body cools the radiation is gives off shifts to longer wavelengths. The coals go from giving off yellow and red light to giving off only red to giving off invisible (but still detectable) infrared radiation as they cool. The kind of radiation given off at any time is a good indication of how long it has been since the fire was burning.  
--James Trefil, "Reading the Mind of God", Charles Scribner's Sons, NY 1989

### ***MARKETPLACE...***

FOR SALE 5-inch, f/8 Astrophysics Starfire refractor. Jaegers heavy duty equatorial mount on light weight pedestal. Clock drive and setting circles. Like new. \$3200.00. Jack Flanagan, 508-263-5533

FOR SALE Leading Edge 8088 Computer with 640K RAM and 20 MB hard disk, 5-1/2 drive, monochromatic monitor, printer, DOS 3.2, all documentation and word processor software. \$600. Ted Poulos, 617-566-5127.

## COMING EVENTS...

- Sept. SPACE INVADERS: ASTEROIDS, METEOR-  
OIDS, AND COMETS at the Hayden  
Planetarium. For more info, call 617-723-  
2500.
- Sept. 12 STARCONN '92, 150 Science Center  
Auditorium, Wesleyan University,  
Middletown, CT. Registration \$12.00.
- Sept. 17 CfA MONTHLY OBSERVATORY NIGHTS,  
"Inconstant Stars: The Curious Variables" by  
Martha Hazen, CfA, 8 p.m., Phillips  
Auditorium, CfA, Cambridge, MA. For more  
info call 617-495-7461.
- Sept. 19 CLUBHOUSE CLEANUP AND PAINTING  
DAY & MONTHLY OBSERVING NIGHT at  
the clubhouse. See page 3.

## EXECUTIVE BOARD 1992-93...

- PRESIDENT: Bernard Volz, 508-881-3614
- VICE PRESIDENT: Mario Motta, 617-334-3648
- SECRETARY: Ted J. Poulos, 617-566-5127
- MEMBERSHIP SEC: John Samolyk, 617-391-9290
- TREASURER: Anthony Costanzo, 508-521-4209
- MEMBERS AT LARGE: Peter Bealo, 603-382-7039  
Anna Hillier, 617-861-8338
- PAST PRESIDENTS: 1990-92 Marion Hochuil  
1989-90 David Aucoin  
1987-89 Gary Walker

## COMMITTEES...

- OBSERVING: Edward Dougherty, 508-458-8857
- WORKSHOP: Greg Chase, 617-272-9394

## AMATEUR TELESCOPE MAKERS OF BOSTON

c/o John Samolyk  
65 Court Street  
Medford, MA 02155

*September 19th  
A CLUBHOUSE TRIPLE EVENT!  
See page 3*

Oct. 2 & 3 ASTRO ASSEMBLY, North Scituate, RI, see  
page 1.

Oct. 10 ATMoB EXECUTIVE BOARD MEETING at  
clubhouse at 7 p.m.

## OCTOBER STAR FIELDS DEADLINE...

September 24th is the deadline for items to be  
included in the Oct. issue of *STAR FIELDS*. Mail or  
phone your contribution to Ted Poulos, 18 Cushing  
Rd., Brookline, MA 02146 (617-566-5127).

## HOW TO FIND US...

MEETINGS: Held the second Thursday of each month  
(September to July) at 8 p.m. in Phillips Auditorium,  
Harvard-Smithsonian Center for Astrophysics, 60  
Garden St., Cambridge, MA. Parking available on the  
grounds.

CLUBHOUSE: 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 495 to exit 33 and  
proceed west on Rt. 40 for 5 miles. Turn right at the  
MIT Lincoln Lab, Haystack Observatory sign at the  
Groton town line. Proceed to the farmhouse on the left  
side of the road. Since clubhouse attendance varies  
with the weather and other activities, it is wise to call  
ahead: 508-692-8708.