

The Focal Point

The Atlanta Astronomy Club
Established 1947
March 2008

Vol. 20 No. 10

Editor: Kat Sarbell

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March General Meeting

By the Editor and Keith "Kosmic Kow" Burns

The next general meeting of the Atlanta Astronomy Club will be on Friday, March 21st, at 8 P.M. at Emory University at White Hall. The meeting will take place in room 207. This is the first room on the left after entering into the building through the double doors. We will have refreshments just outside of the room before the meeting. A small donation in the "kitty" box is requested but not required. Directions to White Hall are on page 7.

The meeting starts at 8 PM sharp. We will have our business meeting first. This includes any announcements and other things of astronomical interest. Anyone who wishes to make announcements please notify Peter Macumber at president@atlantaastronomy.org and Keith Burns at Keith_B@Bellsouth.net. That way Peter knows who is speaking ahead of time and he can schedule the time required. Keith needs to know so he can put your information in a Power Point presentation slideshow that will run before and during the beginning of the business meeting. Please have the announcement info to Keith by no later than Tuesday, March 18th. Our speaker for the March meeting is Horace Dale, a Department of Physics research associate at Emory University. After the talk we will then adjourn the meeting and head off to a local restaurant for supper, dessert, or a drink.

Our Speaker

After serving as a U.S. Army Ranger and then receiving his degree in Manufacturing Engineering from DeKalb College, Mr. Dale joined Emory in 2002. Besides managing the physics machine shop, he is also the observatory supervisor, and teaches Astrophysics and Advanced Lab classes. His research interests include pulsating variable stars and eclipsing binaries. Mr. Dale is also a consultant for SciMeasure



Analytical Systems, where he has built adaptive optics systems for some of the world's great observatories, including Keck, Palomar, Lick, and the Max Planck Institute for Astronomy. His talk will be about his work on variable stars, including the discovery of a new δ -Scuti variable.

Discovery of a New Delta-Scuti Variable in Cassiopeia

Star variability not only gives us a greater understanding of distances in our universe but also an insight into how stars behave at different evolutionary stages. There are roughly 40,000 known variables in our galaxy, of which, there are only a handful of pulsating variables that can be used to determine distances based on their period-luminosity relation. The introduction of the CCD detectors along with improvements to instrumentation has led to the discovery of a sub-class of pulsators known as Delta-Scutis which occupy the extreme lower end of the instability strip on the Hertzsprung-Russell diagram. Since Delta-Scutis have pulsation periods along the order of 1 to 3 hours and amplitudes no greater than 0.1 magnitude, CCD photometry has played a vital role in their detection. Given the comparatively small population of only 540, very little is known about Delta-Scutis because they are difficult to detect and exhibit both radial and non-radial pulsation modes. Therefore it is important for our understanding of this under-studied type of variable to collect and analyze a much larger sample. On October 4th, 2007 a new 12th magnitude Delta-Scuti was discovered and added to the list by Emory University's Physics Department. Proving that even through modest light pollution a viable scientific contribution can be made towards the study of stellar pulsation.

April Meeting Special Announcement

By Keith "Kosmic Kow" Burns

I just wanted to give everyone a heads up on the April meeting. The date is April 18th, 2008 at 8PM. Unlike the others meetings we hold, this one is very special. The Emory University and the Atlanta Astronomy Club have extended an invitation to Jeff Hester of Arizona State University to come speak. Jeff has graciously accepted the offer. Anyone who follows Hubble Space Telescope pictures and news will know who he is. Jeff helped design the instrument they used to fix Hubble's bad mirror. His name is also attached to some the biggest Hubble Space Telescope images. The Pillars of Creation aka M16 is one of his pictures. There are others but I don't want to spoil the talk.

On April 18th we are holding our meeting in room 208 instead of room 207. This is because Emory has invited many others in the community to come and see him. So if you want to come, please come early. Room 207 is the overflow room for those who do not come early enough to get a seat in room 208. They will have video feed to room 2007. Plus Jeff will come over to the overflow room before hand to visit with everyone for a few minutes before the meeting starts. All club members are invited and encouraged to come. So please come if you can. We are suspending our usual program for the evening. The Astronomical League feature and the

Continued on next page

Nothing to See feature will be back in living color for the May meeting. Before the April meeting starts, we will have the announcements power point running on the big screen for all to see. A special power point is forthcoming for this event. I can't tell you anymore right now. You will have to come and find out more.

The program has come about because of the help and work of (1) Rick Williamon, (2) Alex Langoussis, and (3) Keith Burns. I want to especially give a big thank you to Rick Williamon for his hard work in making this happen. From time to time, we will have special meetings like this when possible.

February 15th General Meeting Minutes

By Richard Jakiel, AAC Recording Secretary

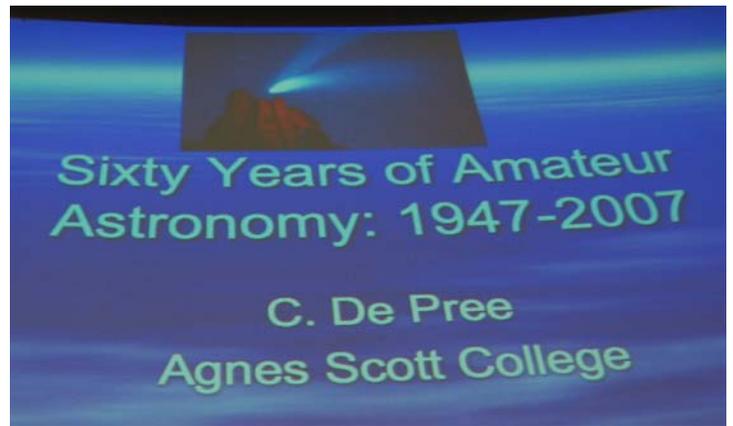
The February 15th meeting of the AAC was held at White Hall, Emory. As most of the officers were either sick or recovering from the flu, Treasurer Sharon Carruthers (right) presided over the meeting. Upcoming events were discussed including this year's "Zombie Party" (March 6 - 9th) at DAV.



In the short program, Kenpo (Ken Poshedly, below) discussed the upcoming total lunar eclipse and the Astronomical League's (AL) lunar observing program. He brought up the 'pros' and the one 'con' of the program (getting up at 4 AM) to observe certain phases of the Moon. Afterward, he passed out printouts on both the eclipse and the requirements for the Lunar Program.



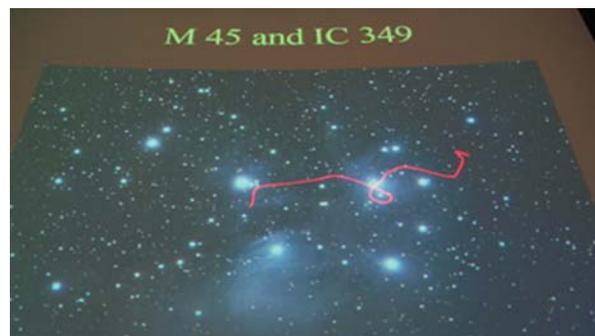
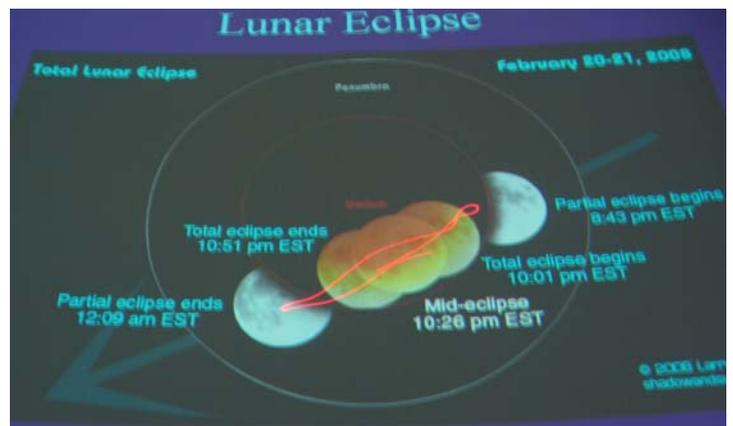
Following Kenpo, Keith Burns the "Kosmic Kow" (left) had another one of his informative and weirdly entertaining Power Point presentations on the night sky. This time around his focus was on the objects close to the Moon during the eclipse (right, top), plus NGC 1973-5-7 - "Running Man Nebula" in Orion and M45 (Pleiades) in Taurus (right, bottom). There were lots of odd sound effects and visuals typical of his presentations.



Dr. Chris DePree (right), associate professor of physics and astronomy at Agnes Scott College, gave an interesting and informative presentation entitled "Sixty Years of Amateur Astronomy: 1947 - 2007". However, he started back in the late 19th century and discussed some of the early amateur organizations including the BAA, AAVSO and the role Agnes Scott College had in the formation of the AMS - American Meteor Society. Later, 1947 was to become a banner year in amateur astronomy with the founding of the AL, ALPO and the AAC. Wrapping it all up, he talked about the contributions of certain prominent amateurs and the continuing cooperation between professionals and the amateur community.



After the meeting, a number of members headed over to Athen's Pizza for the infamous "meeting after the meeting".



All meeting photos by Tom Faber.

The Next AAC Board Meeting

The next Board Meeting of the Atlanta Astronomy Club is scheduled for Sunday, March 16th at 5:00PM at Bradford Map, Globe & Telescopes, 300 Hammond Dr, Sandy Springs. Contact Tom Crowley for details.

Charlie Elliot Meeting Minutes

by Clevis Jones, CE Recording Secretary

(Minutes have been edited for space constraints.)

ATTENDANCE: Twenty-one guests and members enjoyed the February 9th meeting at the Charlie Elliott Visitor's Center. Welcome new members, Scott & Jenny, Alan and Sally! Glad to see you back, Bill!

BUSINESS: Director, Larry Owens, updated the status of Byers Truss Tube project, the equipment Baby Sitting program. Steve Bieger gave an update on his 12-inch Dob project. Jon Wood covered the donation by Tim Nix of Camera Bug in Atlanta to our chapter of an 80% complete 12-inch Dob. That project is available to anyone who would like to complete it. In addition Tim loaned us an artificial star and wants our opinion of it.

Programs Scheduled: March 8 meeting: Pot Luck, and Steve Bieger presents Chicken Pizza (oops, I mean "The Maya and Chichen Itza") at 5:00 p.m.

2008 schedule for the remaining CE Meetings is: Mar. 8, Apr. 5, May 17 (JAKES DAY & Election of Officers), Jun. 7, Jul. 26, Aug. 30, Sep. 27, Oct. 25, Nov. 29, Dec. 27.

FEATURE PRESENTATION: "TELESCOPES" by Steve Bieger. This month's program was for those with a new telescope, or those considering a telescope, and everyone else too. Steve combined his Telescopes How To and Telescopes 101 presentations to include topics of First Things First, Coordinate Systems, Shopping Lists, Extra hints and Tips, and On-line resources.

FEATURE PRESENTATION Part Deux: "Observing the Moon" by Theo Ramakers. Theo took us for a ride on his journey of discovery of observing the Moon. He had us follow him through his research from the not-so-serious-to the serious, from an 1896 book by Herbert A Howe, "A Study of The Sky" which happened to include Atlanta's response to the 1892 appearance of our old friend comet 17/P Holmes, to the many faces emblazoned on the Moon. He covered phases, selenographic coordinates, co-longitude, libration, observing, and links.

What's Up Tonight Steve Bieger included some 'what's up this evening' information in his feature presentation.

Current Events Clevis Jones gave his shortest presentation ever. Hightower Trail Elementary in Conyers has invited us to their SPACE CAMP again this year (4th year) - details will be announced as soon as they are known. Among other things, Clevis covered The Messenger mission flyby of Mercury, and a tricky Columbus & Columbus to a bit of fine music.

OBSERVING SESSION: In company with fifteen kindred soles and our mascot - in a word, PERFECT!

Charlie Elliott Future Meetings

by Clevis Jones, CE Recording Secretary

March 8, 5:00 p.m. - This is a time change - **BACK TO SUMMER SCHEDULE POT LUCK** with Feature Presentation by Steve Bieger, "The Maya and Chichen Itza" - Don't Miss It! - Everyone Welcome! Place: Charlie Elliott Visitor's Center

April meeting: TBD.

For Meeting updates, Directions, Links, & Live broadcasts: PLEASE check the CEastronomy website for the most current information! <http://www.CEastronomy.org>

March is Membership Renewal Month!

Peter Macumber, President Atlanta Astronomy Club

MEMBERSHIP RENEWALS: Last year, we moved the AAC to a "one-date-for-all" membership renewal. ALL CLUB MEMBERS, with some exceptions, should submit their \$30 (\$35 if you receive the mailed *Focal Point*) dues for 2007 by March 20th - The Vernal Equinox. (There will be an R1 in the upper right corner of your *Focal Point*. If you receive the *Focal Point* online you will receive an email - be sure we have your current email address). New members and those who have not yet paid their pro-rated dues, will receive a notice in their *Focal Point* stating the amount you owe to bring you in line with the March date. (There will be either an xxx or an RF on your label). If you have questions or concerns, please let me or the Treasurer know.

Bradley Observatory Open Houses

Amateur Astronomy - Unlike nuclear physics or space flight, astronomy is a scientific discipline to which those without advanced degrees in the subject can and do make significant contributions. An amateur is defined as "a person who engages in a study for pleasure rather than for financial benefit or professional reasons." This year, we will hear from and about a number of "amateur" astronomers, and the contributions that they have made, and are making to our understanding of the universe. All lectures will be held at 8PM at Bradley Observatory on the Agnes Scott College campus. Afterwards there will be a planetarium show and observing with the 30-inch Beck Telescope (weather permitting).

March 14, 2008: W. A. Calder Spring Equinox Concert and Open House.

April 11, 2008: "NASA's Dawn Mission: Exploring the Asteroid Frontier" - Lucy A. McFadden (University of Maryland).

May 9, 2008: Kevin Marvel (American Astronomical Society).

For additional information including directions to Bradley Observatory visit <http://bradley.agnesscott.edu>.



Volunteers set up their scopes before the sun sets. Photo by Tom Faber.

Sidewalk Astronomy at Hopewell Middle School

On Monday, February 25th, the Atlanta Astronomy Club hosted sidewalk astronomy for both kids and parents at Hopewell Middle School in Alpharetta. Brad Isley, sidewalk astronomy coordinator, Mark Sandberg, Keith Burns, Tom Faber, Kat Sarbell and many other club volunteers were there to help the visitors see celestial objects despite passing clouds. Daniel Herron, observing chair, also helped to coordinate the event but was unable to attend.

Lunar Eclipse 2008

Enjoy these photos and reports of the lunar eclipse on February 20/21.

Keith Burns' Report

Big Success at Stooges field (Douglasville, Ga) eclipse viewing. I actually got some very good shots. Skies were very uncooperative and we had decided it was pretty much going to be a big waste of time. The surrender flag had pretty much gone up and we were contemplating retreating to perhaps the local Waffle House. Of course, skies like this make for some interesting cloud pictures. I took about 30 pictures of the clouds. My favorite beverage (*Ed note: Diet Coke*) was resting on the table next to the boombox playing my favorite music. Then there was the favorite chair being put to use. Nothing else to do when waiting for the skies to clear.



But not wanting to quit, Rich and I stuck it out. About 2 minutes before the start of totality, the skies cleared. And I mean cleared. Not sure where the clouds went. They were there one minute and gone the next. I have pictures to prove it. Skies stayed clear for 2 hours before finally starting to erode and turn ugly again. Finally my camera batteries died and the camera chip was full. So at the end of totality we quit and headed inside to see the picture results. To my surprise, a quick check revealed about 20 good shots and several exceptional shots. Wow, I never knew it was possible. The point and click Canon 550 and the lonely astroscan scope pulled off another miracle. Of course, taking about 400 pictures did help. Note, that was without a tripod. I left it at home next to the spare camera memory stick. At least I didn't forget the batteries. Just my brain. (All pictures taken with Canon Powershot A550 digital 7.1 mega pixel. Cloud picture taken during partial eclipse. No tripod used. Other picture taken with camera held to eyepiece. Telescope: Astroscan with 25 millimeter 1 1/4 Plossl.)



Tom Faber's Report

Kat Sarbell and I observed the eclipse from her place near Roswell. A lot of altocumulus was rolling through during the leading partial phase and it was beginning to look pretty bleak but then the skies cleared right about the time totality began! It stayed mostly clear during totality and the trailing partial phase, then the clouds moved back in right as the partial phase ended. I shot about 50-60 photos with a Canon A520 hand held to the 32mm Plossl eyepiece of Kat's Astroscan. A few of them turned out pretty good. Three of the better ones are in the right column.



Leading partial phase during a break in the clouds - 9:34PM, Feb. 20th, 1 sec at f/2.6 on camera.



Totality at 10:08PM, Feb. 20th, 1 sec at f/2.6 on camera.



Near the end of the trailing partial phase - 12:04AM, Feb. 21st, 1/60 sec at f/5.5 on camera.

Dan Llewellyn's Report

Dave Lumpkin (Moe) and I (Schemp) begged off going to Stooges' field, instead choosing greener pastures in the city of Atlanta. (Editor's note: "Stooges' Field" is the observing field next to Rich Jakiel's house.) The Ga Tech Astronomy club had a gathering, and due to the cloud cover coming in, this was an appealing spot in case we got nadda. Close to home, meet new people, have a quick escape. After a brief exchange of words with Curly (Rich), where adjectives such as "traitors" were bandied about, we arrived with most of our stuff...just in case.

As usual, I was running late, so we had a mad scramble to get set up in time. Lots of scopes and students, (surprising, aren't you supposed to be broke as a student?) and, miracle of miracles, the skies started to break clear! Well that was the telltale sign for stoogeness to begin happening.

I quickly recognized I forgot my 2x barlow for imaging. Compass as well. North was still cloudy, drat, I'll have to guess. The AC plug near us was not functioning (these are engineers, right?). My big battery was thrown into duty immediately. With time counting down, I focused and got the S3Pro ready to shoot. Batteries dead. Humph, I charged them before leaving. A closer exam showed I had put my IR S3Pro on the telescope. Quick, change. Right camera on, but it decided to go in a fog and not function for 5 minutes. Refused verbal commands as well.

Meanwhile, Moe decided to give a lesson in how to put a dob together backwards. Having the eyepiece where only an alien could reach it prompted a re-assembly attempt. I told a concerned student Moe knew what he was doing, he was only warming up the crowd that had gathered with his antics. More was to follow. I unscrewed his focuser later rendering it useless with 25 people in line. A quick fix on my part got it back, although some doubted my ability to make the save.

By this time, Mike Silverman had been there a few minutes. Coming in from a business dinner, he looked like a professor, or at least someone in charge. We knew better. By then, at least 100 people were gathered, and the 11-Alive truck was there. Controlled chaos was in order.

We had to carry our gear on a rolling table 100 yards away as per request of Ga Tech. All things finally lined up. My camera started working. Moe dazzled everyone with his Fujinon Binocs on the paragon mount, AND the 10 inch dob. (We later dropped the Binocs off the cart going to the car). High magnification of Saturn ensued. Moe realized there was a 2x barlow in his car. Late better than never. I collimated every scope within eyesight. The evening ended around 1AM. Oh, and I got a picture of the eclipse.



Eclipse 02/21/2008. 04:09UT, Ga Tech Campus, Atlanta, GA, Fuji S3Pro TMB 80mm Refractor, by Dan Llewellyn.

Important Notice - The AAC Board has decided that effective immediately the dues for new and renewing members who receive the MAILED version of the *Focal Point* will increase by \$5.00 per year. This is due to increased printing and mailing costs for the printed *Focal Point*. The dues will remain the same for members who receive the on-line newsletter.

The Astronomical League

As a member of the **Atlanta Astronomy Club** you are automatically also a member of the **Astronomical League**, a nation wide affiliation of astronomy clubs. Membership in the AL provides a number of benefits for you. They include:

- * You will receive *The Reflector*, the AL's quarterly newsletter.
- * You can use the Book Service, through which you can buy astronomy-related books at a 10% discount.
- * You can participate in the Astronomical League's Observing Clubs. The Observing Clubs offer encouragement and certificates of accomplishment for demonstrating observing skills with a variety of instruments and objects. These include the Messier Club, Binocular Messier Club, the Herschel 400 Club, the Deep Sky Binocular Club, and many others.

To learn more about the Astronomical League and its benefits for you, visit <http://www.astroleague.org>

Avalanches on Mars

NASA/JPL News Release - March 3, 2008

PASADENA, Calif. - A NASA spacecraft in orbit around Mars has taken the first ever image of active avalanches near the Red Planet's north pole. The image shows tan clouds billowing away from the foot of a towering slope, where ice and dust have just cascaded down.

The High Resolution Imaging Experiment (HiRISE) on NASA's Mars Reconnaissance Orbiter took the photograph Feb. 19. It is one of approximately 2,400 HiRISE images being released today.

Ingrid Daubar Spitale of the University of Arizona, Tucson, who works on targeting the camera and has studied hundreds of HiRISE images, was the first person to notice the avalanches. "It really surprised me," she said. "It's great to see something so dynamic on Mars. A lot of what we see there hasn't changed for millions of years."



Credit: NASA/JPL-Caltech/University of Arizona

The camera is looking repeatedly at selected places on Mars to track seasonal changes. However, the main target of the Feb. 19 image was not the steep slope.

"We were checking for springtime changes in the carbon-dioxide frost covering a dune field, and finding the avalanches was completely serendipitous," said Candice Hansen, deputy principal investigator for HiRISE, at NASA's Jet Propulsion Laboratory, Pasadena, Calif.

The full image reveals features as small as a desk in a strip of terrain 6 kilometers wide and more than 10 times that long, at 84 degrees north

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latitude. Reddish layers known to be rich in water ice make up the face of a steep slope more than 700 meters tall, running the length of the image.

"We don't know what set off these landslides," said Patrick Russell of the University of Berne, Switzerland, a HiRISE team collaborator. "We plan to take more images of the site through the changing Martian seasons to see if this kind of avalanche happens all year or is restricted to early spring."

More ice than dust probably makes up the material that fell from the upper portion of the scarp. Imaging of the site during coming months will track any changes in the new deposit at the base of the slope. That will help researchers estimate what proportion is ice.

"If blocks of ice broke loose and fell, we expect the water in them will be changing from solid to gas," Russell said. "We'll be watching to see if blocks and other debris shrink in size. What we learn could give us a better understanding of one part of the water cycle on Mars."

Swift Images Galaxy Starbirth

02.26.08 - Goddard Space Flight Center News Release

Imagine looking at a tree through eyeglasses that only allow red light to pass through. The tree is going to look a lot different than how it would look without the glasses. The same goes for a galaxy when astronomers look at it through different types of telescopes.

This new image from NASA's Swift satellite demonstrates what happens when astronomers look at a galaxy in ultraviolet light rather than the visible light that we see with our eyes. Swift took the image through a series of filters that only let in ultraviolet light. We cannot see ultraviolet light with our eyes, but we can feel its effects: it gives us sunburn if we stay out in the Sun too long on a bright, sunny day.

The Swift ultraviolet image shows the Triangulum Galaxy, so named



Image credit: NASA/Swift Science Team/Stefan Immler.

because it resides in the northern constellation Triangulum. The galaxy is also known as M33, because it's the 33rd object in a catalog of sky objects that was assembled by French astronomer Charles Messier in the 1700s. The galaxy itself is about half the size of our Milky Way Galaxy, and is located about 2.9 million light-years from Earth. This means that it takes the light from M33 2.9 million years to reach Earth.

The image itself is actually a mosaic of 13 individual pictures that were taken between December 23, 2007 and January 4, 2008. Astronomer Stefan Immler of NASA's Goddard Space Flight Center used a computer to stitch the individual pictures into a seamless image. "This is the most detailed ultraviolet image of an entire galaxy ever taken," says Immler.

The image clearly shows the spiral structure of M33. New stars are forming inside the spiral arms. These stars are very hot, and give off a lot of ultraviolet light. This light hits nearby clouds of gas, heating them up and causing them to also shine in ultraviolet light.

"The ultraviolet colors of star clusters tell us their ages and compositions," says Swift team member Stephen Holland of NASA Goddard. "With Swift's high spatial resolution, we can zero in on the clusters themselves and separate out nearby stars and gas clouds. This will enable us to trace the star-forming history of the entire galaxy."

"The entire galaxy is ablaze with starbirth," adds Immler. "Despite M33's small size, it has a much higher star-formation rate than our Milky Way Galaxy. All of this starbirth lights up the galaxy in the ultraviolet."

Spacecraft at Mars prepare for Phoenix

NASA/JPL News Release - February 28, 2008

Three Mars spacecraft are adjusting their orbits to be over the right place at the right time to listen to NASA's Phoenix Mars Lander as it enters the Martian atmosphere on May 25.

Every landing on Mars is difficult. Having three orbiters track Phoenix as it streaks through Mars' atmosphere will set a new standard for coverage of critical events during a robotic landing. The data stream from Phoenix will be relayed to Earth throughout the spacecraft's entry, descent and landing events. If all goes well, the flow of information will continue for one minute after touchdown. "We will have diagnostic information from the top of the atmosphere to the ground that will give us insight into the landing sequence," said David Spencer of NASA's Jet Propulsion Laboratory, Pasadena, Calif., deputy project manager for the Phoenix Mars Lander project. This information would be valuable in the event of a problem with the landing and has the potential to benefit the design of future landers.

Bob Mase, mission manager at JPL for NASA's Mars Odyssey orbiter, said, "We have been precisely managing the trajectory to position Odyssey overhead when Phoenix arrives, to ensure we are ready for communications. Without those adjustments, we would be almost exactly on the opposite side of the planet when Phoenix arrives."

NASA's Mars Reconnaissance Orbiter is making adjustments in bigger increments, with one firing of thrusters on Feb. 6 and at least one more planned in April. The European Space Agency's Mars Express orbiter has also maneuvered to be in place to record transmissions from Phoenix during the landing. Even the NASA rovers Spirit and Opportunity have been aiding preparations, simulating transmissions from Phoenix for tests with the orbiters.

Phoenix will land farther north than any previous mission to Mars, at a site expected to have frozen water mixed with soil just below the surface. The lander will use a robotic arm to put samples of soil and ice into laboratory instruments. One goal is to study whether the site has ever had conditions favorable for supporting microbial life.

Phoenix will hit the top of the Martian atmosphere at 5.7 kilometers per second. In the next seven minutes, it will use heat-shield friction, a parachute, then descent rockets to slow to about 2.4 meters per second before landing on three legs.

Odyssey will tilt from its normally downward-looking orientation to turn its ultrahigh-frequency (UHF) antenna toward the descending Phoenix. As Odyssey receives a stream of information from Phoenix, it will immediately relay the stream to Earth with a more capable high-gain antenna.

The other two orbiters, Mars Reconnaissance Orbiter and Mars Express, will record transmissions from Phoenix during the descent, as backup to ensure that all data is captured, then transmit the whole files to Earth after the landing.

"We will begin recording about 10 minutes before the landing," said JPL's Ben Jai, mission manager for Mars Reconnaissance Orbiter.

The orbiters' advance support for the Phoenix mission also includes examination of potential landing sites, which is continuing. After landing,

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the support will include relaying communication between Phoenix and Earth during the three months that Phoenix is scheduled to operate on the surface. Additionally, NASA and European Space Agency ground stations are performing measurements to determine the trajectory of Phoenix with high precision.

With about 160 million kilometers still to fly as of late February, Phoenix continues to carry out testing and other preparations of its instruments. The pressure and temperature sensors of the meteorological station provided by the Canadian Space Agency were calibrated Feb. 27 for the final time before landing.

"The spacecraft has been behaving so well that we have been able to focus much of the team's attention on preparations for landing and surface operations," Spencer said.

Georgia Astronomy in State Parks (GASP) Events

The GASP events for 2008 are being planned. Scheduled so far is:

March 29th - Tallulah Gorge State Park.

For more information about these events, contact Joanne Cirincione at Starrynights@AtlantaAstronomy.org.



The GASP volunteers at FDR State Park on Labor Day weekend 2004 - From left to right: Joanne Cirincione, Keith Burns, Harold and Claudia Champ with Ginger, Peter Macumber, Sharon Carruthers, Tom Faber, Kat Sarbell, and Holly and John Ritger. Photo by Holly Ritger.

Atlanta Astronomy Club Website

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is printed. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events updates (when available) and other information. <http://www.atlantaastronomy.org>

The **Atlanta Astronomy Club, Inc.**, the South's largest and oldest astronomical society, meets at **8:00 P.M.** on the third Friday of each month at Emory University's White Hall or occasionally at other locations or times. Membership is open to all. Membership fees are **\$30 (\$35)** for a family or single person membership. College Students membership fee is **\$15 (\$20)**. These fees are for a one year membership (\$5 per year extra charge to receive the *Focal Point* mailed).

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for *Sky & Telescope* and **\$34** for *Astronomy*. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155.

AAC Web Page: <http://www.AtlantaAstronomy.Org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

AAC Officers and Contacts

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PSSG Chairman: Peter Macumber pmacumber@nightsky.org

Co-Chair: Joanne Cirincione starrynights@AtlantaAstronomy.org

Sidewalk Astronomy: Brad Isley
sidewalkastronomy@atlantaastronomy.com

Woodruff Observ. Coordinator: Sharon Carruthers
Treasurer@AtlantaAstronomy.org

Webmaster Atlanta Astronomy: Peter Macumber 770-941-4640
pmacumber@nightsky.org

Directions to White Hall at Emory

Our meetings are generally held in a classroom in White Hall. To get to White Hall, turn onto Dowman Drive from North Decatur Road at the five way intersection (across from Everybody's Pizza). White Hall is located across from the new Science & Math building. Parking is available along Dowman Drive on both sides of the road. **The parking lot on the left behind the Admissions Building may be closed.** Additional parking is available in two parking decks near White Hall. For maps to the decks see <http://map.emory.edu>. For more detailed directions to Emory University, visit www.atlantaastronomy.org or go to the Emory web site.

Calendar by Tom Faber (All times EST/EDT unless noted)

- March 3rd, Monday: Mercury Greatest Western Elongation.
March 6th-9th, **Zombie Party at DAV - Contact Daniel Herron for details.**
March 7th, Friday: New Moon.
March 8th, Saturday: **CEC Meeting - See pg 3 for details.**
March 9th, Sunday: Daylight Savings Time begins at 2AM.
March 14th, Friday: Moon First Quarter. Bradley Observatory Equinox Concert, 8PM. See pg. 3 for details.
March 15th, Saturday: **New Member Orientation at Villa Rica - Contact Daniel Herron.**
March 16th, Sunday: **AAC Board Meeting, 5PM at Bradford Map, Globe, and Telescope.**
March 20th, Thursday: Equinox at 1:48AM.
March 21st, Friday: **AAC Meeting at White Hall, 8PM, Emory University.** Full Moon.
March 22nd, Saturday: **Telescope & Instrument Workshop - Contact Sharon Carruthers.**
March 24th, Monday: Mercury near Venus.
March 29th, Saturday: **GASP at Tallulah Gorge State Park - See pg 7 for details.**
March 30th, Sunday: Moon Last Quarter.
April 5th, Saturday: **CEC Meeting - See pg 3 for details.** New Moon.
April 11th, Friday: Bradley Observatory Open House, 8PM. See pg. 3 for details.
April 12th, Saturday: **Open House at Villa Rica - Contact Daniel Herron for details.** Moon First Quarter.
April 18th, Friday: **AAC Meeting/Jeff Hester talk at White Hall, 8PM, Emory University.**
April 19th, Saturday: **Telescope & Instrument Workshop - Contact Sharon Carruthers for details.** Full Moon.
April 23rd, Wednesday: Lyrid Meteors.
April 28th, Monday: Moon Last Quarter.
May 4th, Sunday: New Moon.
May 9th, Friday: Bradley Observatory Open House, 8PM. See pg. 3 for details.

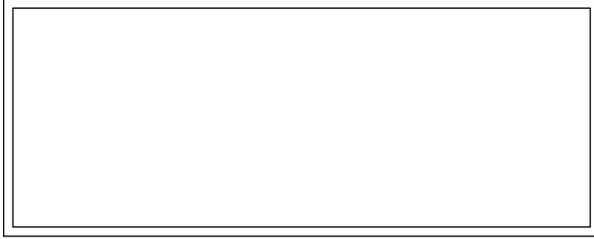
Atlanta Astronomy Club Listserve

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: AstroAtlanta@yahoogroups.com . To add a subscription, send a message to: AstroAtlanta-subscribe@yahoogroups.com . This list is owned by Lenny Abbey.

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy related to [Kat Sarbell at focalpoint@atlantaastronomy.org](mailto:KatSarbell@atlantaastronomy.org). Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents are okay. You can submit articles anytime up and including the deadline date. **The deadline for April is Thursday, March 27th at 4:00 PM ... Submissions will no longer be accepted after the deadline.**

FIRST CLASS



Newsletter of The Atlanta Astronomy Club, Inc.

We're here to help! Here's how to reach us:

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