

The Focal Point

The Atlanta Astronomy Club

Established 1947

May 2006

Vol XVIII No. 12

Editor: Kat Sarbell

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May General Membership Meeting

By Keith "Kosmic Kow" Burns, Program Chair

The next General meeting of the Atlanta Astronomy Club will be on May 19th at 8 P.M. at Emory University in White Hall. The room number is 207. Directions to Emory are on page 7 of this newsletter. We will have refreshments in the hallway just outside of the room before the meeting. A small donation in the kitty box is requested by not required.

The meeting starts at 8 PM. We will have a business meeting first. This includes any announcements and other things of astronomical interest. I ask that anyone who wishes to make any announcements, please notify Philip Sacco via email at (president@atlantaastronomy.org) and also email Me (Keith Burns) via email at Keith_B@Bellsouth.net. That way Philip knows who is speaking ahead of time and he can schedule the time. I need to know so I can put your information on a power point presentation slide that will run before and during the beginning of the business meeting. I will not be at the meeting. Please have the announcement stuff to me by no later than May 12th, 2006.

This month we will have the elections during the business part of the meeting. Don Hall, Art Zorka, and Dan Llwelley will conduct the election. Nominations of candidates from the floor will be accepted at this time. Note that anyone nominated for office must be a club member and be willing to take the job if they win. The slate of nominees as of the April are: 1) President: Peter Macumber and Philip Sacco 2) VP Program Chair: Keith Burns 3) VP Observing Chair: Daniel Herron. 4) Recording Secretary: Rich Jakiel 5) Corresponding Secretary: Kat Sarbell 6) Treasurer: Sharon Carruthers. 7) Board Position 1: Alex Langoussis. 8) Board Position 2: Gil Shillcutt 9) Board Position 3: Tom Crowley. Note the officer terms run for 1 year and the board terms run for 2 years.

Our featured speaker of the night, Dr. Robert Knop, Jr., will give his talk with questions and answers to follow. We adjourned the meeting and head off to a local eating establishment for supper, dessert, and/or just a drink.

About the Talk: Stars within a galaxy almost never run into each other; this is a good thing, for if they did happen, the planets would have almost certainly been stripped from our Solar System, and we would be in trouble. The reason for this is how far apart stars are from each other, compared to their size. Galaxies are different. While they are immensely bigger than stars, and also in absolute terms farther apart, their distances compared to their sizes are not so great as that comparison is for stars. Consequently, we see galaxies colliding frequently. When they do, interesting things happen: the galaxies become tangled up, creating beautiful images; tremendous bursts of star formation can be triggered; and,

Continued on next page

Woodruff Boy Scout Summer Camp

by Sharon Carruthers, Treasurer

The Summer Scout Camping season is fast upon us. This is not only our time to "pay the rent" for our use of Woodruff as a Dark Sky site; but also our best opportunity to fulfill our Club mandate to "educate" and "to promote the public knowledge of and interest in astronomy".

John Lentini will be retiring to the Keys this year and has passed over the Scout-AAC liaison duties to Chuck Swan and me. We had a very productive meeting with the whole scout leadership on Friday April 28th and have set up the needs and expectations for the coming camp season.

This year they would like our Club to take a more active role in the education process for the astronomy merit badge, then help out with some hands-on field observing with the Club's 24" (and the member's scopes, as well).

The preliminary plan is to have an astronomy "power point program (PPP)" starting around 9 p.m. on Monday night.

On Thursday "scope night" you would help set up the 24" about an hour before sunset (8:30 - 9 p.m.). The scouts will be on the field at 7:30 reviewing their skills and would be viewing with the scopes when it gets dark (from 9:30 p.m.). We will be scheduling training on the 24" before camp starts - contact us if you want to be trained for the summer program.

Chuck and I will commit to the Monday night PPP - but we welcome anyone else who would like to volunteer to help out. If you have ever wanted to do the astronomy "talk circuit", here is your chance to get some practice.

We need volunteers to commit to go up on Thursdays, from June 8 - July 27. Please phone or e-mail us if you can commit to one or more evenings. You can contact Chuck Swann at CharlesESwann@cs.com and myself, Sharon Carruthers, at scarruthers@AtlantaAstronomy.org, or at 770-941-4640 (h) or 404-843-9610 (w).

We want to thank John Lentini for his years of service as liaison between the Scouts and the AAC.



possibly, the super-massive black holes at the cores of the galaxies may be fed gas, turning on active galactic nuclei.

Dr. Robert A. Knop Jr. received his BS from Harvey Mudd College in 1990, and his PhD from Caltech in 1997. At Caltech, he worked on infrared spectroscopy of active galaxies. After graduating, he moved to Lawrence Berkeley Laboratory and worked with the supernova

cosmology project for five years. There, he was closely involved with the 1998 discovery and announcement that the Universe is accelerating, and must therefore be filled with a mysterious "Dark Energy." In 2001, he joined the faculty of the Department of Physics and Astronomy at Vanderbilt University, where he is today an assistant professor. His current research interests focus on observations of interacting and active galaxies. Dr. Knop works with the Harlow Shapley Visiting Lecture Program which is run by the American Astronomical Society.

Upcoming speakers and programs

June 16th, 2006 Brad Meyer of Clemson University will speak on Stellar Evolution.

July 21st, 2006 Paul Wallace of Berry College will give a talk on the Copernicus Revolution.

August 18th, 2006 Dennis Hands of GTCC Cline Observatory/Natural Science Center of Greensboro will talk about, " My Two Weeks On Mars."

September 15th, 2006 April Whitt of Fernbank Science Center will speak on a topic to be announced.

Charlie Elliott April Meeting Minutes

by Clevis Jones, CEC Recording Secretary

ATTENDANCE: Ten guests and members attended the meeting held on Saturday April 22.

BUSINESS: ATTENTION - At the MAY 20 meeting, officer elections will be held after the Pot Luck Dinner. Debbie Jones will conduct the elections. See her before the meeting or she will be asking for nominees at the start of the elections. Please consider volunteering. Duties of the Director, Observing Supervisor, and Recording Secretary can be reviewed here: <http://www.atlantaastronomy.org/CEWMA/bylaws.html> Charlie Elliott coordinator, Alesia Rast, pointed out MAY 20 is JAKE'S DAY (volunteers are needed to man the astronomy booth from 10 a.m. to 2 p.m.). And SUMMER CAMP OVERNIGHTS are JUNE 12-16, and JULY 10-14 (volunteers with telescopes are needed to show the kids the night sky). Please volunteer by contacting Larry Owens at planetographer@comcast.net

Ken Poshedley advised everyone there is an ALPO conference in Atlanta July 21-22. Technical papers will be presented and Larry Owens will be giving a Planetary Imaging presentation on that Saturday morning.

Chapter Director, Larry Owens, gave an update on the club's projects: CEC FUND RAISER - sales of prints of Larry's images has collected \$1070, with about \$400 more needed to complete the 16-inch truss tube project. THANKS to all for your support! The mirror is a superb one

and is now at Galaxy Optics for recoating. The Truss tube project will use the current Meade cell and Larry 'may' design and install a rotating head. BYERS MOUNT - Larry and Michael Covington are tweaking the chip parameters to get the slow motion control right on. The 16-INCH SONOTUBE'S secondary vibrates easily. It may have its spider replaced with a circular mount. The 3.1-inch diagonal has been received. REQUIREMENTS for training and use for the clubs scopes were discussed - generally, everyone wants to keep it as absolutely simple as possible.

REFRESHMENTS - Ken Poshedley and Alesia Rast THANK YOU.

The TELESCOPE TRAILER now has a tag - MANY THANKS TO SHARON CARRUTHERS.

Jim Honeycutt donated a 12.5-inch Coulter mirror, secondary and cells to the CEC for a Dob project. Thanks Jim! Steve Beiger volunteered to build the Dob. Larry Owens volunteered to raise the funds and to get the mirrors recoated. Thanks guys!

OBSERVING REPORT: What's Up Tonight: Steve Bieger presented "What's Up Tonight". April is the Full Pink Moon. Jupiter is closest to Earth on May 4. Steve covered information on Johann Bayer and Richard Proctor, the Ursa Major Moving Group, and URLs to interesting Websites.

CURRENT EVENTS REPORT: Clevis Jones covered material on the ISS, Sun, The Seven Sisters Getting Mooned on April 1, the breakup of Comet 73P/Schwassmann-Wachmann 3 and its close approach May 12-14.

FEATURE PRESENTATION: None - but several members stayed to watch a very good documentary on APOLLO 8.

OBSERVING SESSION: About 10 people went to the field for a beautiful evening of observing.

Charlie Elliott May Meeting

by Clevis Jones, CEC Recording Secretary

MEETING DATES AND PROGRAMS:

May 20 at 5:00 p.m.

POT LUCK DINNER, OFFICER ELECTIONS: Please consider volunteering. The club By-Laws are here: <http://www.atlantaastronomy.org/CEWMA/bylaws.html>

What's Up Tonight: by Steve Beiger

Current Events: by Clevis Jones

Feature Presentation:

"Imaging and Processing with the Autostar Suite" by Jonathan Wood. The Meade Autostar Suite includes a planetarium program, telescope and dome control, planetary ephemerides and even an imaging program that controls all of Meade's cameras. Jonathan will guide us through this complex software and share his imaging expertise with the Meade DSI camera.

June 17 at 5:00 p.m.

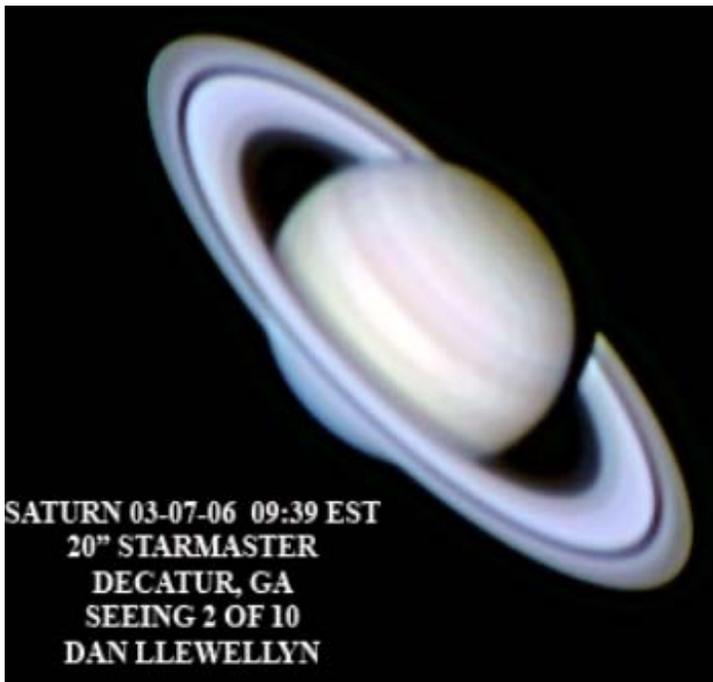
Dr. Richard Schmude will present a program on Jupiter.

FOR UPDATES & DIRECTIONS: PLEASE check the CEC website for the most current information! <http://www.atlantaastronomy.org/CEWMA/>

The Telescope & Instrument Workshop

by Sharon Carruthers, Treasurer@AtlantaAStronomy.org

The next T&IW will be on Saturday, May 27 at 11 AM at Bradford Map/ Telescope Atlanta, 300 Hammond Dr, Sandy Springs.. I have acquired some 6" mirror blanks and we will be doing a mirror grinding workshop. You can buy one of the blanks, if you wish to take a stab at making your own scope, or help us grind some mirrors to make some loaners for the AAC. If you have any ideas or plans for the construction of the OTA & base for a 6", bring them along.



First Run Saturn

by Dan Llewellyn

This was taken under terrible seeing conditions on the night of March 7, 2006. Rich Simons was helping, and we both could not believe how bad things degraded. So, this is a little surprise that came out. I re-center spotted my mirror with Rich "The Mirror Man" Simons's help. It made a tremendous difference. Anyway, this is first run processing. I think I can get it better, but I ran out of gas last night and this is my stopping point.

April 22nd DSO Report

by Daniel Herron

What a night we had last night. It rained on us on the way up to Woodruff around 3. When we got there the clouds were clearing and by 5 they were gone and we had crystal clear skies. As it got dark we looked at Saturn until more stars popped out. At around 9:18 the ISS flew almost directly over head and brightened to -0.4 magnitude as it crossed the sky from horizon to horizon. We looked at M42 as it was setting and it was still awesome in the light dome.

We also saw one fragment of Comet Schwassmann-Wachmann 3. It had a bright core and a small streaming tail that quickly disappeared into the background. As the night moved on and the comet rose higher and darker skies, the tail seemed to grow longer. Around 10 or 10:30 we had about 30 Boy Scouts come onto the field and we talked about astronomy and showed them Saturn, Jupiter, M81, M82, M13, and M57 They left around 11:15 or so and we started looking for some Lyrids.

The Lyrids were a bit of a disappointment (in meteor per minute) but we did see some awesome meteors - around 20 throughout the night. Giving up on just looking for meteors we started looking for some deeper dimmer objects and switched between Saturn, some messier objects, and the comet. You just cannot beat observing with others interested in the same things you are!! Check out the photos section of the Atlanta Astronomy Club listserv for some cool pics!!



Lunar Sunrise

Image by Rich Jakiel

One night in the past month was blessed with decent seeing - that is until the cirrus "crud" rolled in. I imaged a very tiny Mars (6.6 arc-seconds) and then the Moon with the 12-inch at f/10. This lunarscape (Archimedes/Appennines) was perhaps the sharpest I took last night.

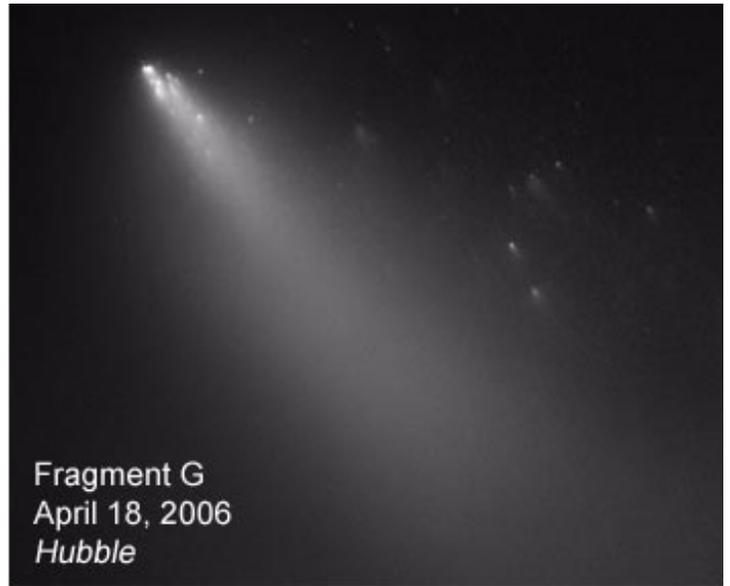
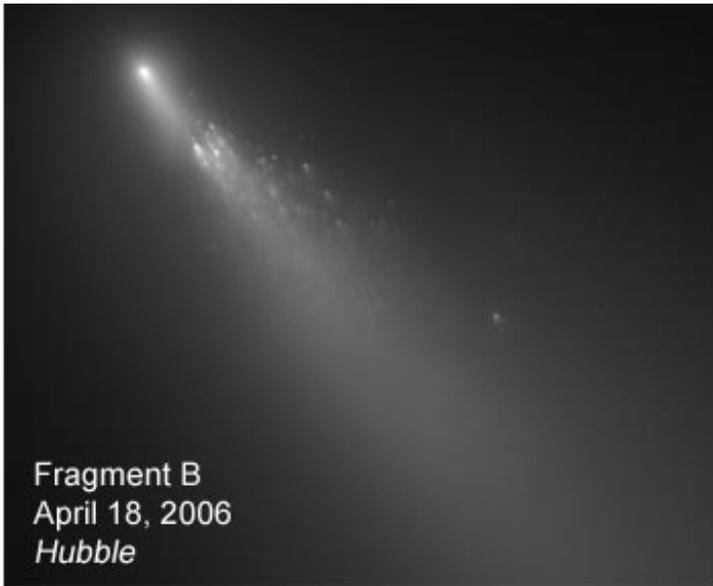
Hubble Provides Spectacular Detail of a Comet's Breakup

Space Telescope Science Institute News Release - April 27, 2006

NASA's Hubble Space Telescope is providing astronomers with extraordinary views of comet 73P/Schwassmann-Wachmann 3, which is falling apart right before our eyes. Recent Hubble images have uncovered many more fragments than have been reported by ground-based observers. These observations provide an unprecedented opportunity to study the demise of a comet nucleus.

Amateur and professional astronomers around the world have been tracking for years the spectacular disintegration of 73P/Schwassmann-Wachmann 3. As it plunges toward a June 6th swing around the Sun, the comet will pass Earth on May 12th, at a distance of 7.3 million miles.

The comet is currently comprised of a chain of over three dozen separate fragments, named alphabetically, stretching across several degrees on the sky. Ground-based observers have noted dramatic brightening events associated with some of the fragments (as shown in the bottom frame) indicating that they are continuing to break-up and that some may disappear altogether. *Continued on next page.*



Hubble caught two of the fragments, B and G, shortly after large outbursts in activity. Hubble also photographed fragment C, which was less active. The resulting images reveal that a hierarchical destruction process is taking place, in which fragments are continuing to break into smaller chunks. Several dozen "mini-fragments" are found trailing behind each main fragment, probably associated with the ejection of house-sized chunks of surface material that can only be detected in these very sensitive and high-resolution Hubble images.

Sequential Hubble images of the B fragment, taken a few days apart, suggest that the chunks are pushed down the tail by outgassing from the icy, sunward-facing surfaces of the chunks, much like space-walking astronauts are propelled by their jetpacks. The smaller chunks have the lowest mass, and so are accelerated away from the parent nucleus faster than the larger chunks. Some of the chunks seem to dissipate completely over the course of several days.

Deep-freeze relics of the early solar system, cometary nuclei are porous and fragile mixes of dust and ices. They can be broken apart by gravitational tidal forces when they pass near large bodies (for example, Comet Shoemaker-Levy 9 was torn to pieces when it skirted near Jupiter in 1992, prior to plunging into Jupiter's atmosphere two years later). They can also fly apart from rapid rotation of the nucleus, break apart because of thermal stresses as they pass near the Sun, or explosively pop apart like corks from champagne bottles due to the outburst of trapped volatile gases.

"Catastrophic breakups may be the ultimate fate of most comets," says planetary astronomer Hal Weaver of the Johns Hopkins University Applied Physics Laboratory, who led the team that made the recent Hubble observations and who used Hubble previously to study the fragmentations of comets Shoemaker-Levy 9 in 1993-1994, Hyakutake in 1996, and 1999 S4 (LINEAR) in 2000. Analysis of the new Hubble data, and data taken by other observatories as the comet approaches the Earth and Sun, may reveal which of these breakup mechanisms are contributing to the disintegration of 73P/Schwassmann-Wachmann 3.

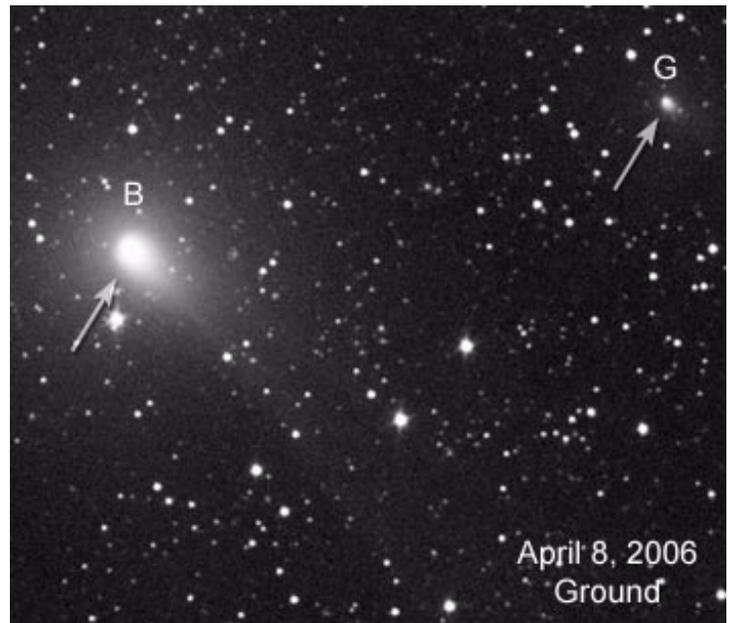
German astronomers Arnold Schwassmann and Arno Arthur Wachmann discovered this comet during a photographic search for asteroids in 1930, when the comet passed within 5.8 million miles of the Earth. The comet orbits the Sun every 5.4 years, but it was not seen again until 1979. The comet was missed again in 1985 but has been observed every return since then.

During the fall of 1995, the comet had a huge outburst in activity and shortly afterwards four separate nuclei were identified and labeled "A", "B", "C", and "D", with "C" being the largest and the presumed principal

remnant of the original nucleus. Only the C and B fragments were definitively observed during the next return, possibly because of the poor geometry for the 2000-2001 apparition. The much better observing circumstances during this year's return may be partly responsible for the detection of so many new fragments, but it is also likely that the disintegration of the comet is now accelerating. Whether any of the many fragments will survive the trip around the Sun remains to be seen.

Besides Weaver, the other members of the Hubble observing team are: Carey Lisse (JHU/APL), Philippe Lamy (Laboratoire d'Astronomie Spatiale, France), Imre Toth (Hungarian Academy of Sciences), William Reach (IPAC/Caltech), and Max Mutchler (STScI).

The Hubble Space Telescope is an international cooperative project between NASA and the European Space Agency. The Space Telescope Science Institute in Baltimore conducts Hubble science operations. The Institute is operated for NASA by the Association of Universities for Research in Astronomy, Inc., Washington.



Credit for Hubble images: NASA, ESA, H. Weaver (JHU/APL), M. Mutchler and Z. Levay (STScI); Ground-based image: G. Rhemann and M. Jager

Pieces of NASA's Next Mars Mission are Coming Together

NASA/JPL News Release - April 26, 2006

NASA's Phoenix Mars Lander, the next mission to the surface of Mars, is beginning a new phase in preparation for a launch in August 2007.

As part of this "assembly, test and launch operations" phase, Phoenix team members are beginning to add complex subsystems such as the flight computer, power systems and science instruments to the main structure of the spacecraft. The work combines efforts of Lockheed Martin Space Systems, Denver; the University of Arizona, Tucson; and NASA's Jet Propulsion Laboratory, Pasadena, Calif.

"All the subsystems and instruments from a wide range of suppliers are tested separately, but now we are beginning the vital stage of assembling them together and testing how they will function with each other," said JPL's Barry Goldstein, project manager for Phoenix.

Phoenix will land near the red planet's north polar ice cap to analyze scooped-up samples of icy soil.

"We know there is plenty of water frozen into the surface layer of Mars at high latitudes. We've designed Phoenix to tell us more about this region as a possible habitat for life," said the University of Arizona's Peter Smith, principal investigator for the mission.

Phoenix is the first mission of NASA's Mars Scout Program of competitively proposed, relatively low-cost missions to Mars. The program is currently soliciting proposals for a 2011 Scout mission.

The Phoenix proposal, selected in 2003, saves expense by using a lander structure, subsystem components and protective aeroshell originally built for a 2001 lander mission that was canceled while in development. The budget for the Phoenix mission, including launch, is \$386 million.

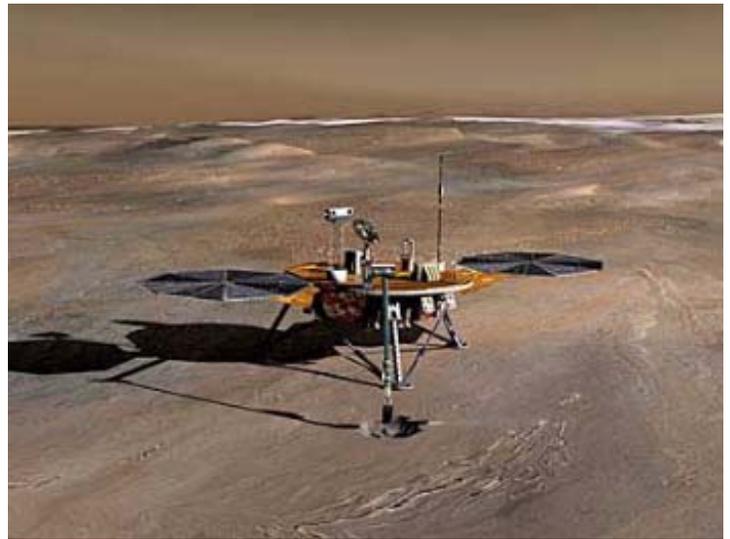
The spacecraft will land using descent thrusters just prior to touchdown, rather than airbags like those used by the current Mars Exploration Rovers. As Phoenix parachutes through Mars' lower atmosphere in May 2008, a descent camera will take images for providing geological context about the landing site.

The robotic arm being built for Phoenix will be about 2 meters long, jointed at the elbow and wrist, and equipped with a camera and scoop. It will dig as deep as about 50 centimeters and deliver samples to instruments on the spacecraft deck that will analyze physical and chemical properties of the ices and other materials. A stereo color camera will examine the landing site's terrain and provide positioning information for the arm. The Canadian Space Agency is providing a suite of weather instruments for Phoenix.

"The propulsion system and the wiring harness have been added to the vehicle," said Ed Sedivy, Phoenix program manager for Lockheed Martin. "We will be loading flight software onto the flight computer in the next few days. The flight software is much more mature than typical for a planetary program at this stage. As soon as the flight computer is mated up, we can apply external power to the vehicle."

Navigation components, such as star trackers, and communication subsystems will become part of the spacecraft in coming weeks, followed by science instruments in the summer.

Phoenix will be shipped to NASA's Kennedy Space Center, Florida, in May 2007, for final preparations leading up to launch. Before that, testing in Colorado will subject the spacecraft to expected operational environments. This includes thermal and vacuum tests simulating the 10-month trip to Mars and conditions on Mars' surface. Meanwhile, the mission is preparing a test facility in Tucson for practicing and testing procedures for operating the spacecraft on Mars.



The Phoenix lander on Mars. Credit: NASA/JPL/LPL

Galaxies Don Mask of Stars in New Spitzer Image

NASA/JPL News Release - April 26, 2006

A pair of dancing galaxies appears dressed for a cosmic masquerade in a new image from NASA's Spitzer Space Telescope.

The infrared picture shows what looks like two icy blue eyes staring through an elaborate, swirling red mask. These "eyes" are actually the cores of two merging galaxies, called NGC 2207 and IC 2163, which recently met and began to twirl around each other.

The "mask" is made up of the galaxies' twisted spiral arms. Dotted along the arms, like strings of decorative pearls, are dusty clusters of newborn stars. This is the first time that clusters of this type, called "beads on a string" by astronomers, have been seen in NGC 2207 and IC 2163.

"This is the most elaborate case of beading we've seen in galaxies," said Dr. Debra Elmegreen of Vassar College in Poughkeepsie, N.Y. "They are evenly spaced and sized along the arms of both galaxies." Elmegreen is lead author of a paper describing the Spitzer observations in the May 1 issue of the *Astrophysical Journal*. *Continued on next page*





Astronomers say the beads were formed when the galactic duo first met. "The galaxies shook each other, causing gas and dust to move around and collect into pockets dense enough to collapse gravitationally," said Dr. Kartik Sheth of NASA's Spitzer Science Center at the California Institute of Technology in Pasadena. Once this material condensed into thick bead-like clouds, stars of various sizes began to pop up within them.

Spitzer's infrared camera was able to see the dusty clouds for the first time because they glow with infrared light. The hot, young stars housed inside the clouds heat up the dust, which then radiates at infrared wavelengths. This dust is false-colored red in the image, while stars are represented in blue.

The Spitzer data also reveal an unusually bright bead adorning the left side of the "mask." This dazzling orb is so packed full of dusty materials that it accounts for five percent of the total infrared light coming from both galaxies. Elmegreen's team thinks the central stars in this dense cluster might have merged to become a black hole.

Visible-light images of the galaxies show stars located inside the beads, but the beads themselves are invisible. In those pictures, the galaxies look more like a set of owl-like eyes with "feathers" of scattered stars.

NGC 2207 and IC 2163 are located 140 million light-years away in the Canis Major constellation. The two galaxies will meld into one in about 500 million years, bringing their masquerade days to an end.

Other authors of this research include Bruce Elmegreen of IBM Watson Research Center, Yorktown Heights, N.Y., Michele Kaufman of Ohio State University, Columbus; Curt Struck of Iowa State, Ames; Magnus Thomasson of Onsala Space Observatory, Sweden; and Elias Brinks of the University of Hertfordshire, United Kingdom.

The Jet Propulsion Laboratory manages the Spitzer Space Telescope mission for NASA's Science Mission Directorate, Washington. Science operations are conducted at the Spitzer Science Center at Caltech. JPL is a division of Caltech. Spitzer's infrared array camera was built by NASA's Goddard Space Flight Center, Greenbelt, Md. The instrument's principal investigator is Dr. Giovanni Fazio of the Harvard-Smithsonian Center for Astrophysics. Image Credit: NASA/JPL-Caltech/Vassar

Hubble Spies Gemstones in the Southern Sky

Space Telescope Science Institute News Release - April 18, 2006

The Hubble Space Telescope has captured the most detailed images to date of the open star clusters NGC 265 and NGC 290 in the Small Magellanic Cloud -- two sparkling sets of gemstones in the southern sky.

These images, taken with Hubble's Advanced Camera for Surveys, show a myriad of stars in crystal clear detail. The brilliant open star clusters are located about 200,000 light-years away and are roughly 65 light-years across.

Star clusters can be held together tightly by gravity, as is the case with densely packed crowds of hundreds of thousands of stars, called globular clusters. Or, they can be more loosely bound, irregularly shaped groupings of up to several thousands of stars, like the open clusters shown in this image.

The stars in these open clusters are all relatively young and were born from the same cloud of interstellar gas. Just as old school-friends drift apart after graduation, the stars in an open cluster will only remain together for a limited time and gradually disperse into space, pulled away by the gravitational tugs of other passing clusters and clouds of gas. Most open clusters dissolve within a few hundred million years, whereas the more tightly bound globular clusters can exist for many billions of years.

Open star clusters make excellent astronomical laboratories. The stars may have different masses, but all are at about the same distance, move in the same general direction, and have approximately the same age and chemical composition. They can be studied and compared to find out more about stellar evolution, the ages of such clusters, and much more.

The Small Magellanic Cloud, which hosts the two star clusters, is one of the small satellite galaxies of the Milky Way. It can be seen with the unaided eye as a hazy patch in the constellation Tucana (the Toucan) in the Southern Hemisphere. The Small Magellanic Cloud is rich in gas nebulae and star clusters. It is most likely that this irregular galaxy has been disrupted through repeated interactions with the Milky Way, resulting in the vigorous star-forming activity seen throughout the cloud. NGC 265 and NGC 290 may very well owe their existence to these close encounters with the Milky Way.

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The images were taken in October and November 2004 through F435W, F555W, and F814W filters (shown in blue, green, and red, respectively).

The Hubble Space Telescope is a project of international cooperation between NASA and the European Space Agency. The Space Telescope Science Institute in Baltimore conducts Hubble science operations. The Institute is operated for NASA by the Association of Universities for Research in Astronomy, Inc., Washington.

Image Credit: European Space Agency & NASA

Georgia Astronomy in State Parks (GASP) Events

Here are the remaining GASP events for 2006:

June 10th -
Amicalola Falls State Park

September 2nd
(Labor Day Weekend) - FDR State Park

November 11th -
Florence Marina State Park



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

The GASP volunteers at Unicoi State Park in March 2006 - Front row, from left to right: Holly Ritger, Sharon Carruthers, Juergen & Nancy Berninger, and Claudia Champ with Ginger. Back row, left to right: John Ritger, Peter Macumber, Joanne Cirincione, Harold Champ, Kat Sarbell, Tom Faber, and Keith Burns. 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** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

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.

Atlanta Astronomy Club Hot Line: Timely information on the night sky and astronomy in the Atlanta area. Call **770-621-2661**.

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 Contacts

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PSSG Chairman: Peter Macumber pmacumber@nightsky.org

Co-Chair: Joanne Cirincione starrynights@AtlantaAstronomy.org

Sidewalk Astronomy: position open

Woodruff Observ. Coordinator: John Lentini 770-984-0175
johnlentini@yahoo.com

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

Directions to White Hall at Emory

Meeting Location Information:

Turn onto Dowman Drive from North Decatur Road at the five way intersection (across from Everybody's Pizza). White Hall is located on the right across from the new Science & Math building. Parking is available along Dowman Drive on both sides of the road. There is also a gated parking lot on the left behind the Admissions Building. After 6PM there is no fee to park there. For more detailed directions on how to get to Emory University, visit www.atlantaastronomy.org.

Calendar by Tom Faber (All times EDT unless noted)

- May 3rd, Wednesday: Jupiter at Opposition.
- May 5th, Friday: Moon First Quarter. Bradley Observatory Open House, 8PM, Agnes Scott College, "Astronomy and Public Outreach", Anita Kern - Fernbank Museum (Last Open House until Fall).
- May 6th, Saturday: Astronomy Day at Fernbank Science Center, 11AM - Contact Daniel Herron for details. Eta Aquarid Meteors.
- May 13th, Saturday: Full Moon (Planting Moon or Milk Moon).
- May 19th, Friday: **AAC Meeting at White Hall and Elections**, 8PM, Emory University.
- May 20th, Saturday: Moon Last Quarter. New Member Social and Picnic at Barber Observatory, Villa Rica. CEC Meeting - see p.2 for details.
- May 24th, Wednesday: Moon near Venus.
- May 27th, Saturday: New Moon. Telescope & Instrument Workshop, 11:00 AM - see p.2 for details. DSO and Picnic at Deerlick Astronomy Village - Contact Daniel Herron for details.
- May 31st, Wednesday: Moon and Saturn near M44.
- June 3rd, Saturday: Moon First Quarter.
- June 10th, Saturday: GASP at Amicalola State Park - see p.7 for details.
- June 11th, Sunday: Full Moon (Rose, Flower, or Strawberry Moon).
- June 14th, Wednesday: Earliest Sunrise (~6:25AM at Atlanta). Mars and Saturn in M44.
- June 16th, Friday: **AAC Meeting at White Hall**, 8PM, Emory University. Pluto at Opposition. June Lyrids Meteors.
- June 17th, Saturday: CEC Meeting - see p.2 for details. Mars passes Saturn.
- June 18th, Sunday: Moon Last Quarter.
- June 20th, Tuesday: Mercury Greatest Eastern Elongation.
- June 21st, Wednesday: Solstice at 8:26AM.
- June 24th, Saturday: DSO at TBD - Contact Daniel Herron for details.
- June 25th, Sunday: New Moon.
- June 27th, Tuesday: Latest Sunset (~8:52PM at Atlanta).

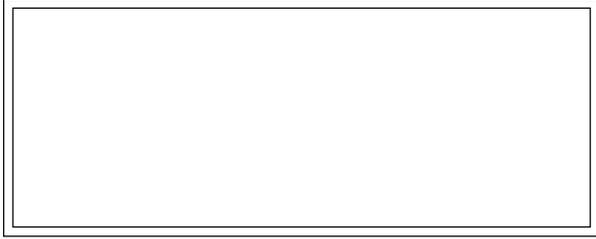
Atlanta Astronomy Club Listserve

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 Info

Please send articles, pictures, and drawings in electronic format on anything astronomy related to Kat Sarbell at focalpoint@atlantaastronomy.org. You can submit articles anytime up and including the deadline date. **The deadline for May is Thursday, April 27th at 4:00 PM Submissions will no longer be accepted after the deadline.**

FIRST CLASS



Newsletter of The Atlanta Astronomy Club, Inc.



FROM:

Kat Sarbell

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

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