



Public Programs for April

Our next member’s meeting will be held on Friday, April 18th at 7 p.m. It will be a panel of RCAA founding members Dave Christensen, George Ferrell and Ted Paludan, along with early members Gert Schmitz, Skeet Vaughan, and Otis Henderson. They will share unique perspectives on the society’s founding, evolution, and projects over the past five decades, and its inherent ties to the Rocket City and space exploration. VBAS Member Meetings are held on the 3rd Friday of each month at 7 p.m.; they’re open to the public and are free.

Regular planetarium programs start at 7:30 PM. This month, we continue a year-long series on the planets and other bodies of our Solar System with three family-friendly shows on Mars, on April 5th, 12th, and 26th. Dr. Robert Preece will present his talk about the *Gamma Ray Burst Monitor* on the 19th. Admission to planetarium shows is free for VBAS Members, \$5.00 for Adults, \$3.00 for Students, and free for children under 6. Observation of the night sky through various telescopes normally follows each planetarium program, weather permitting.

A New Lifetime Member

At the public planetarium show on Saturday, March 22nd, Lonnie Puterbaugh renewed his VBAS membership... to a lifetime membership! He is now one of less than a dozen current lifetime members. Lonnie lives and works in Nashville, and he is an active member of the Barnard Seyfert Astronomical Society. He is known for his Astronomy Channel road show (see TheAstronomyChannel.com), which he has brought to Huntsville (VBAS and science fairs) several times in the last few years.

The Universe is Expanding! But How Fast....?

On page 4, Eric Johnson reports on the VBAS road trip to Sewanee, TN. Several members went to see a presentation by Dr. Wendy Freeman about measuring the Hubble Constant, then toured the Cordell-Lorenz Observatory.

Various Short Articles

On page 5, Melissa informs us about the Astronomical League national convention coming up in Iowa in July. On page 6, John informs us that HATS is seeking nominees for their Board of Directors, tells us how the April meeting Member’s Choice vote came out, and updates us about the Nominating Committee’s activities, and the annual election.

VBAS Board Meeting Minutes

Page 7 has the draft minutes of February’s board meeting. Thanks, Jeff!

Steve Sloan
Via Stellaris Editor
steve@sloan3d.com

Deadline for May 2008 Via Stellaris submissions is Monday, April 28.



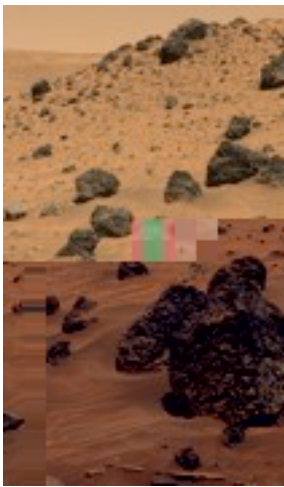
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Saturday, April 5th, 12th, & 26th, 2008, 7:30 PM

Exploring Mars

Our year-long exploration of the Solar System continues with a family-friendly show on Mars. Despite all of the excitement in recent decades over astronauts, space stations and exploding galaxies, it still seems nothing in outer space fires the imagination more than the Red Planet. The facts, fiction, myths and legend of the planet Mars will be the focus of the Von Braun Astronomical Society's April planetarium shows.



Volcanic bumpy boulder on Mars. (Image credit: Mars Exploration Rover Mission, Cornell, JPL, NASA)

Friday, April 18th, 2008, 7 PM

After a short pizza social and marketplace swap meet, we'll discuss pertinent society business. The program committee is honored to present and moderate a panel of RCAA founding members Dave Christensen, George Ferrell and Ted Paludan, along with early members Gert Schmitz, Skeet Vaughan, and Otis Henderson. The panel will share unique perspectives on the society's founding, evolution, and projects over the past five decades, and its inherent ties to the Rocket City and space exploration. Visitors are welcome.

Saturday, April 19th, 2008, 9 AM to 4 PM

Location: Hayes Preserve

VBAS will again be supporting the Hayes Preserve's Earth Day event this year. For more information, contact Soos Weber at 256-427-5116, or visit their

website at www.hsvcity.com/recreation/hayesnature. The Hayes Preserve is located just off Highway 431, near Hampton Cove. Any VBAS members that would like to help with this event for an hour or two should contact Melissa Snider or Richard Norman for scheduling.

Saturday, April 19th, 2008, 7:30 PM

Gamma Ray Burst

Monitor

Presented by Dr. Robert Preece

The Universe is home to numerous exotic and beautiful phenomena, some of which can generate almost inconceivable amounts of energy. Supermassive black holes, merging neutron stars, and streams of hot gas moving close to the speed of light are but a few of the marvels that generate gamma-ray radiation, the most energetic form of radiation, billions of times more energetic than the light visible to our eyes. Join us as UAH research professor and project co-investigator Dr. Robert Preece presents an intriguing insight into the Gamma-Ray Large Area Space Telescope (GLAST) Burst Monitor, which is scheduled to launch in May!

Friday, May 2nd, 2008, After Dark

In the spring months, it's possible to log all 110 of the objects in the catalog compiled by French astronomer Charles Messier in one evening. Join us for a night of observing as many of the objects in the Messier catalog as you can find. We'll be up late to view as many of these "faint fuzzies" as possible. Members are encouraged to participate and bring your scopes. The public is welcome to join in – with or without telescopes.



Saturday, May 3rd, 10th, 24th, & 31st, 2008, 7:30 PM *Friday, May 16th, 2008, 7 PM*

All About Asteroids

Got rocks? Our solar system sure does! It is a really rockin' place with a spectacular collection of asteroids! Come join us for a fun-filled look at some of these big rocks as we tour the asteroid fields in our program. This trip is recommended for all ages. We will also explore where asteroids came from, what they are made of, and learn how they are discovered.

Ida and Dactyl: Asteroid and Moon. (Image credit: Galileo Project, JPL, NASA)



Join us for our annual gathering. We'll highlight the state of the society, including major accomplishments and future plans, present the annual budget for 2008-2009, hold our annual elections, and recognize some of our members for their outstanding contributions in forwarding the mission of VBAS.

Saturday, May 17th, 2008, 7:30 PM

Technical Program to

be Announced

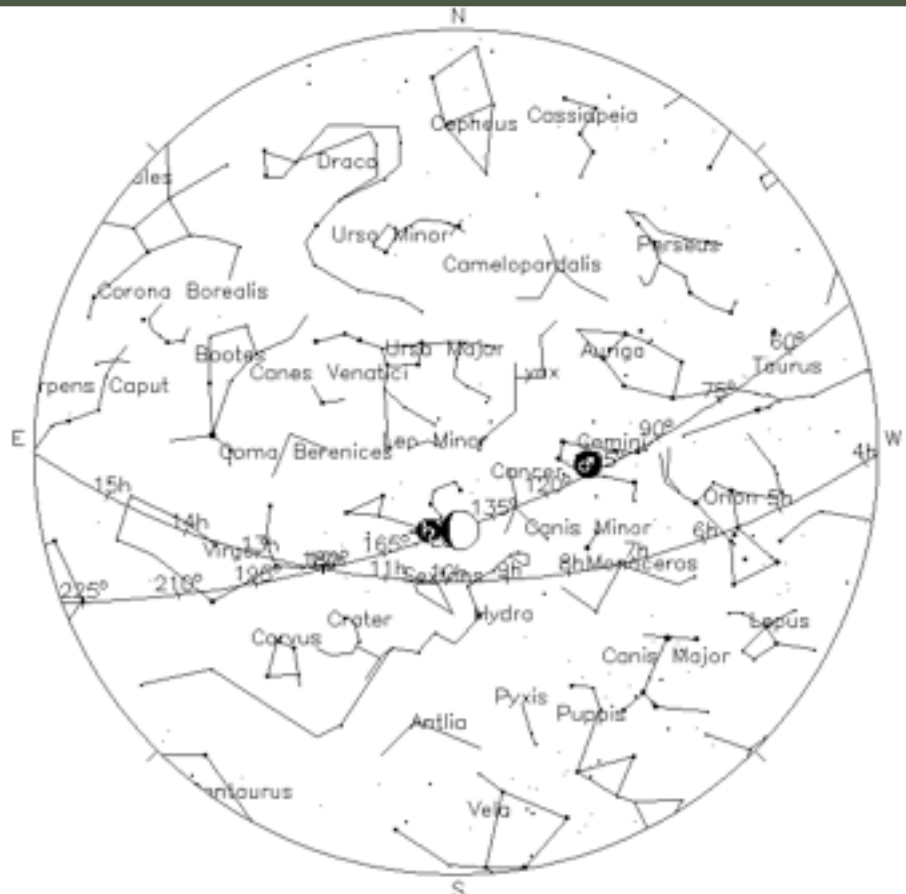
Presented by TBD

The topic and speaker for the third Saturday of each month is geared a little more to the technical side of astronomy and related sciences. The speaker and topic are currently TBA.

...And as always, for the most up-to-date information about VBAS events, be sure to check the web site at vbas.org.

Here is the view at 9 PM in mid April, 2008, at 34° N Latitude, 86° W Longitude. Mars, the spear-and-shield symbol, will be easily visible overhead, in Gemini. Jupiter, the "h"-like symbol, will be near the Moon in Leo.

Map courtesy of John Walker and YourSky (<http://www.fourmilab.to/yoursky/>).



by Eric Johnson

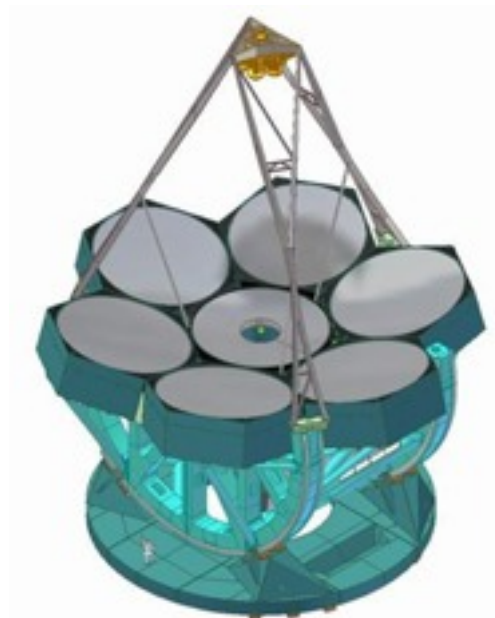
The evening of Monday March 17th, VBAS members journeyed to Sewanee, TN, the University of the South, for a presentation by Dr. Wendy Freedman. She has dedicated much of her career pursuing a question that has remained unresolved since Einstein's Theory of Relativity.

Also, VBAS members were generously treated to a historic tour of the Cordell-Lorenz Observatory by the Physics and Astronomy Chair, Dr. Doug Durig.



Dr. Freedman

Among the many distinctions Dr. Freedman has attained, she is the Chair of the Giant Magellan Telescope (GMO), which is sponsored by the Carnegie Science Foundation, along with several Universities and other research organizations from around the world. The GMO will have an 80 ft primary mirror, will have 10 times sharper image than the Hubble Telescope, and is being built at Las Campanas, Chile, home of the twin 6.5 meter Magellan Telescopes.



The Magellan Telescope with an 80 ft primary

But the GMO is merely an instrument to view into our universe's past as are all astronomical telescopes. Dr. Freedman will utilize this instrument of precision as she did the Hubble Telescope to assist in calculating the actual rate at which our universe is expanding. Edwin Hubble, who in the early 1900's proved the universe was expanding, found the "fudge factor" in Albert Einstein's Theory of Relativity referred to as the cosmological constant (also commonly known as the Hubble Constant).

As Dr. Freedman illustrated with a student's apple, "The expansion of the universe is not two dimensional", where an ant crawls across using the surface of an apple. The ant can crawl all over the apple, but he is still on the surface of a spherical plane. Most people think of the Big Bang Theory as originating from a single point in space, with the edge of the know universe as a spherical plane like the surface of the apple. As she explained, the birth of the Universe was four-dimensional, encompassing time and space.

One of the methods Dr. Freedman and her team use to measure the rate of expansion of the universe is through Cepheid Variables. These types of variable stars are used because they have a pre-

dictable and variable rate of luminosity. By comparing these Cepheids, Edwin Hubble was able to show not only that the universe was expanding, but the most distant stars from us were moving away the fastest. Dr. Freedman and her team will use the GMO and previous information from the Hubble Space Telescope while calculating the most accurate prediction of the Hubble Constant.

After the enlightening presentation, we enjoyed a reception of fine hors d'oeuvres and refreshments from the University's Lecture Series. Following the reception, VBAS members were given a personal tour of the astronomy facilities atop Carnegie Hall at the University of the South. Yes, Carnegie Hall was funded by the same Andrew Carnegie Organization that sponsors the Carnegie Science Foundation mentioned earlier.

During the tour of the Cordell-Lorenz Observatory, Dr. Druig shared with us some of the detailed astrophotography they have done, and the extensive control center for the telescopes. On the main roof they have an array of Meade LX200s, and a variety of precision scopes in other roll-off and flip-off roofs. The highlight of the evening was still another level up the castle keep to the limestone-walled historic observatory. The unique copper-clad dome was some of the last copper to be available before World War II. Housed inside this copper patina dome is a brass, 6 inch, $f/15$, Alvan Clark refractor made in 1897.

In all, the trip was most enlightening and we all benefited. Not only did we learn more about our universe, but we also met fellow astronomers and explored their world. VBAS members who attended included Tom Burlson and his wife, Lonnie Puterbaugh and his wife and her daughter, Doug Horacek, and Eric Johnson.

by Melissa Snider

Looking for ways to put a little astronomy into your summer vacation?

The Astronomical League's annual national convention will be hosted this year by the Des Moines Astronomical Society.

Featured presentations include NASA perspectives on the final Hubble Space telescope repair and gravitational lensing, as well as workshops on astrophotography and building active local clubs. Non-astronomers in the family can enjoy area tours to local attractions, including Winterset's famous "Bridges of Madison County."

Participants and families can kick back together Friday night for a Star Picnic at the Ashton Observatory.

Dates: July 18-19 (Friday and Saturday)

Location: Des Moines Marriott Downtown (Iowa)

Fee: \$65 before June 30

<http://www.alconexpo.com/>

Registration coordinators:

Terry and Cheryl Haimann

515-243-7740

by John Young

The Huntsville Association of Technical Societies is an umbrella organization for over 50 professional, technical, and trade organizations in North Alabama. Founded in 1969, their charter members include IEEE, AIAA, VBAS (RCAA), ASPE and others. Their core programs include the Professional of the Year banquet and the Stedtrain

educational grant program. Nominations are being accepted for Vice President, Secretary, Treasurer, Membership Director, and Programs Director. Please visit their website at: www.hats.org for more information, or contact me directly at jgy71@knology.net or 797-6038 if you have any further questions or would like to get involved.

by John Young

The membership was queried over the last few months about topics and speakers of interest and then given the opportunity to vote on three options via the March Via Stellaris and at our March 21st member's meeting. As you can see by the calendar in this month's issue, the majority decided to hear and learn from a panel of some of VBAS' founding and early members. I think we're all in for a real treat!

As always, your input and involvement with the program committee is encouraged and welcome. We will do our best to keep things interesting and

lively but it's up to you, the members of this unique society, to keep us posted with fresh ideas. Our next quarterly meeting will be Friday, May 2nd at 6:30 p.m. in the planetarium. Yep, just an hour or so before the Messier Marathon! Thanks go to Terry Owens, Doug Horacek, Richard Norman, Jared Cassidy, Wes Swift, and James Brelsford for their committee involvement. Please contact me directly at jgy71@knology.net or 797-6038 if you have any questions or ideas, or would like to get involved.

by John Young

The Nominating Committee has made some headway in finding volunteers for the 2008-2009 board of directors. However, the nominating committee is not fully staffed. Our bylaws call for a minimum of five members – two officers and three from the general membership. We must have some involvement from the general membership. Determined involvement by any and all is key to the success of any effort, especially an all-volunteer group like ours. Serving on the board or in a committee is a great way to help the society and yourself. Ideas are shared, skills are learned, and people make things happen!

As per the bylaws, the nominating committee provided an update to the attendees of the March member's meeting. The next step will be accepting

nominees from the floor of the April member's meeting and then providing written notification of the list of nominees for each position. The notification will be in the form of a "mailable" ballot that will be included in the May edition of the Via Stellaris. Instructions will be included for those who can't attend and vote in person at the Annual Meeting on May 16th. Members who are listed on the membership roster as not having internet access will receive a ballot by mail. Finally, for those who want or need a copy of the ballot sent to them, please contact our secretary Steve Sloan at steve@sloan3d.com.

penses were lower than budget, mostly in the facilities area. She then went on to present the report from Nov 21 – Feb 11, and the overall statement of accounts. Total cash assets stand at \$69,918.00, of which approximately \$48,000 is NASA grant money designated primarily for the restroom addition. Michael moved to approve the report, Jeff seconded the motion, and it passed.

Michael reviewed upcoming required actions specified in the by-laws. The first is the formation of a nominating committee. Michael moved we appoint John Young as chair of the nominating committee, and for him to fill the committee as specified by the by-laws. Jared seconded the motion and it passed.

The second required action is to form a budget committee, chaired by Jared as Director of Administration, with Sara as a member. We also need an independent audit. Jared agreed to form the committee.

Michael reported that Gerry Conrad agreed to be membership secretary, and moved that he be approved for that position. Jared seconded the motion and it passed.

Michael then asked for other officer reports:

Melissa reported that she's planning to hold planetarium training, likely sometime in April.

Jared reported that we received a \$250 donation from Stanley Associates, Inc. and Ricky Laws (member) toward our building fund. Michael plans to send a letter of appreciation.

Michael moved to extend lifetime membership to Gerry Simpson for working so diligently on the plans and specs for the restroom addition. Melissa seconded and the motion passed.

Michael then moved that VBAS join the Huntsville Chamber of Commerce for one year at \$300. Jeff seconded. Discussion centered on potential benefits of advertising/promotion of VBAS, contacts in the business community, and a potential for a social with other Chamber members to get to know VBAS. Now the motion passed.

Contributions to Via Stellaris

We welcome contributions to our newsletter that may be of interest to the astronomical community. Contributions are best sent by email to Steve Sloan at editor1@vbas.org. If you don't have access to email, you can send articles in either Word or ASCII format to Steve at 2110 Vilaret Dr, Huntsville, AL 35803.

Membership and Renewal

The VBAS currently has four categories of membership. All four include free admission to the planetarium shows; subscription to this newsletter; membership in the Astronomical League; and use of VBAS library and equipment. The four categories of membership, and the dues for each, are: REGULAR at \$24.00 per year, FAMILY at \$36.00 per year, STUDENT (must be full-time student) at \$12.00 per year, and LIFE at \$500.00. Newsletter Only is also available for \$12.00 per year. Membership renewal occurs for all members annually on March 1st.

All VBAS memberships came up for renewal on March 1, 2008. If you have questions regarding membership, please contact Gerry Conrad.

Please send your renewal to the Membership Secretary at VBAS, P.O. Box 1142, Huntsville, AL 35807. Make checks payable to the Von Braun Astronomical Society. If your mailing or email address changes, please report the new address promptly to the Membership Secretary, Gerry Conrad, at conrad1908@knology.net or 722-8212, to avoid missing issues of *Via Stellaris*.

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Steve Sloan, Via Stellaris editor