



# RVAS

Roanoke Valley Astronomical Society

News About Amateur Astronomy  
In Southwestern Virginia  
<http://www.roavas.org>



Vol. 22 - No. 7

July 2005

## **FIRST ANNUAL(?) ALMOST HEAVEN STAR PARTY**

*By Katherine Hix, RVAS President*

The Northern Virginia Astronomy Club's inaugural Almost Heaven Star Party (June 2-5, 2005) almost went the other way. There cannot be a more inauspicious opening to a three-day camping trip and star party than pitching one's tent in 20-m.p.h. winds with driving rain in 50-something-degree temperatures. The fog was so thick I got lost coming back to my tent from the bank of port-a-johns. You could not see past the end of the flashlight beam. The fellow camped next to us did a heroic job of setting up his elaborate campsite with a separate tent for his scope. Unfortunately, he also brought along his noticeably unhappy wife and crying baby. The next morning, after all the work he had done in the pouring rain to try to make them comfy, they were gone. It made me feel TOUGH, I must say. People from RVAS who braved this frontier were John Goss, Paul Caffrey, Steve and Barbara Manuel, and Mike Overacker. My husband, Don Hix, came along, and my middle daughter, Mary Beth Ramsey, and her beau, Mike Casey, came to hike, kayak and check out their first star party. We stayed because what the heck - it could only get



*The AHSP Observing Field and Camping area. The camp fortress in the foreground belongs to the Katherine Hix family. In the left background you see the vehicles and campsites of John Goss, Paul Caffery, and Mike Overacker. Just out of view to the far left are the port-a-pottys, within a short walk of the RVAS campsites. RVAS clearly held the high ground.*

better, which it did, but not for stargazing. At least not for awhile. We cooked our own meals on a propane stove, hiked some of the innumerable trails, and made a vain effort to go canoeing/kayaking. The Potomac River runs through the area, but it is very shallow and rocky there, not good for much else but vigorous wading. We ended up paddling around on Spruce Knob Lake, which is more of a pond and is most suited to fishing along the shoreline. The hiking was great,

with a vast trail network through all sorts of terrain. The trip to the top of Spruce Knob, West Virginia's highest peak, was also worth the effort. There is a short trail that goes all the way around the top of the mountain, so you get a 360-degree view, which was incredible - I counted mountain peaks at least seven deep. On one of our hikes, we discovered a beaver dam, with a big fat beaver doing the backstroke. He was clearly showing off.

*Continued at AHSP 2005, Page 5*

## JUNE 2005 RVAS MEETING NOTES

By Mark Hodges, RVAS Secretary



### MYSTERY OBJECT

You might think of this object while you are "buffing up" your "Bi's and Tri's" at the gym.

Send your best guess to Dave Thomas, our Mystery Object Columnist, at

thomasde-ka8inl@worldnet.att.net

Mike Overacker opened the meeting. There were approximately 24 members and visitors present.

Lynn is still recovering from his surgery so there wasn't a treasurer's report.

Observing reports- Carol Messimer shared the sky with a group of Girl Scouts at the Franklin County Recreation Park.

Five of our members attended the Almost Heaven Star Party in W.Va. Paul McCaffrey, John Goss, Mike Overacker, Katherine Hix and her husband Don. John reported that the weather was cloudy and rainy except for about an hour on Saturday night. Mike left Saturday night and had some clear skies on the way back; he said there were so many stars visible that he had trouble recognizing constellations.

Mike Overacker presented the constellation of the month, this month it was Bootes.

Mark Hodges reported that the museum has acquired a moon rock from NASA and is currently on display in the museum's new gem and mineral gallery. At the end of the meeting everyone went in to the gallery to see the "rock". The sample was acquired in February 1971 at the Frau Mauro landing site by Edgar Mitchell.

John Goss presented the main program for the evening. He and his wife Genevieve recently took a trip to Chili, among other things they did get some observing time in with an 8" reflector that they took with them. He talked about places they visited and some of the sights ✦

## ASTRO-QUIZ

Suppose you owned a 15" f/4.5 reflector. Would a 40mm eyepiece be a good choice to complement your scope?

Answer to Last Month's Astro-Quiz: An eyepiece's apparent field of view may be as large as 82 degrees, but this is not the true field or amount of the sky you're actually seeing through your telescope. You can estimate the true field of an eyepiece knowing that stars drift across your eyepiece field at the rate of 15 arcsec per sec. (You can do the math with 360 degrees and 24 hours per day.) Switch off any drives and put a star at one edge of your eyepiece's field and time how long it takes to get to the other edge. For low power eyepieces, which often have true fields of one degree or more, this would take four minutes. Convert the total arcseconds back to degrees and you'll have your true field for the eyepiece. If you're lazy, you can approximate the true field by dividing your apparent field by the magnification given by the eyepiece.

The Roanoke Valley Astronomical Society is a membership organization of amateur astronomers dedicated to the pursuit of observational and photographic activities. Meetings are held at 7:30 p.m. the third Monday of each month at Center in the Square in downtown Roanoke, Virginia. Meetings are open to the public. Observing sessions are held one or two weekends a month at a dark-sky site. Yearly individual dues are \$20.00. Family membership is \$25.00; student membership is \$10.00. For information, call the RVAS Message Line at 540-774-5651. Articles, quotes, etc. published in the newsletter do not necessarily reflect the views of the RVAS, its editor, officers, or individual members.

**RVAS web page:** <http://www.roavas.org>

**Officers/Executive Committee:** Katherine Hix, President (334-2443); Mike Overacker, Vice President and Newsletter Editor (776-3092); Mark Hodges, Secretary (774-5039); Lynn Slonaker, Treasurer (774-5695); Bruce Jones, Executive Committee Member-At-Large (774-3844); Paul Caffrey, Immediate Past President (345-2847); Dave Godman, Past President / New Member Coordinator (774-3337); John Goss and Genevieve Goss, Outreach Coordinators (966-4606); Frank Baratta, Membership and Public Viewing Coordinator (774-5651); Mahesh Tailor, Web Master (776-5472)

# THE LOCAL GROUP



By Genevieve Goss

Time is running out to register for this year's AlCon Expo in Kansas City. Register at a reduced rate by July 15 for this premier event, scheduled for August 12 & 13, pairing the best in exhibitors with

a full complement of speakers. Airfares aren't cheap this year, but United and Northwest fares from ROA to MCI have been running at \$211 (amazingly, Greensboro is more expensive!) and Dulles is at \$183. Raleigh-Durham still

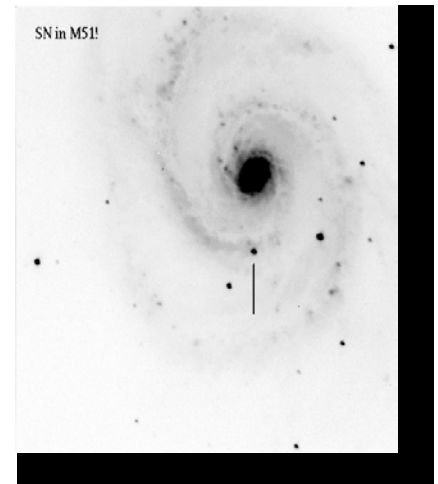
remains the best deal at \$153 RT. If you've missed the bargain rates at the Sheraton Overland Park hotel, there are many other chains represented in the Overland Park area. Visit <http://www.alconexpo.org> for full details. ✦

## NEW SUPERNOVA IN M51

By Michael Overacker,  
RVAS Vice-President

A new Supernova has recently been discovered in M51, the Whirlpool Galaxy, in Canes Venatici. It is at Magnitude 13.5 and is located 15" west and 67.3"

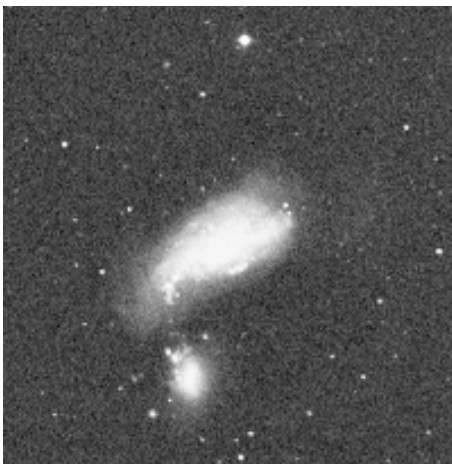
south of the galaxy nucleus. It has been named 2005cs and was discovered by Wolfgang Kloehr. This is an excellent opportunity to catch a supernova in a galaxy that is very easy to find. Check it out as soon as you can. Supernovas do not last forever. Supernova is at the top of the line in the LOSS image to the right. ✦



## LAST MONTH'S MYSTERY OBJECT

NGC 4490 is the mystery object for the month of June. It is located in Canes Venatici at R.A. 12h 30.6m and at Dec. 41 deg, 38m and shines at magnitude 9.8.

About 400 million years ago NGC 4490, also known as the Cocoon galaxy, had a close encounter with a smaller galaxy, NGC 4485. The two are now separated by a distance of 7,700 parsecs and visible in the same field of view..



## \*\*\* IMPORTANT - DUES AND SUBSCRIPTION NOTICE \*\*\*

It's renewal time for RVAS memberships, most of which expire on June 30, 2005. If your membership expires at another time, you'll receive a special notice. If you want to know now when your membership expires, **call Frank Baratta at 774-5651**. Membership categories are:

**INDIVIDUAL (\$20.00 per year)** - RVAS and Astronomical League membership for you.

**FAMILY (\$25.00 per year)** - RVAS and Astronomical League membership for you and your family.

**STUDENT (\$10.00 per year)** -RVAS and Astronomical League membership for a full-time student.

Make checks payable to "RVAS," and forward to: **Lynn Slonaker, RVAS Treasurer, 3548 Kenwick Trail, Roanoke, VA 24018.**

**MAGAZINES:** Members may subscribe to *Astronomy* (\$29.00) and/or *Sky & Telescope* (\$32.95) at the indicated substantial club discount rates. Subscriptions are sent to the publishers each April 15th, August 15th and December 15th. Renewal payments should be submitted by whichever of these dates is at least 4 months prior to the expiration of your magazine(s). Orders may be added to dues payments, or submitted separately.

## **COMET TEMPEL MEETS DEEP IMPACT**

*By Clark Thomas*

On the evening of July 3-4, about 1:30 a.m., a projectile from the Deep Impact spacecraft will blast at high speed into comet 9P Tempel 1, a.k.a. comet Tempel. Unfortunately for us, this impact will occur shortly after the comet has set below our western horizon. Folks on the West Coast and in the Pacific will get the best show. We will need to wait until the next night, or nights, to see what effect this experiment has had on that comet's nucleus. The comet nucleus is about half the size of Manhattan. Even before impact it is available to small telescopes. What happens thereafter is a mystery. The comet could brighten

considerably, or show little increase. That's the fun of it all, a mystery where we amateurs have a ring side seat.

To claim your ring side seat you should attempt to view the comet before the impact, and then after. Our club will be sponsoring two times to view it, before and after, from Cahas. Join us about 10 p.m. on Sunday night, July 3rd, and you will see it only hours before impact, about four degrees above and to the left of bright Spica. It should be at the 10 o'clock position. Its coordinates will be 13:37.6 and -09:30.0 It will be about 140 million miles (mm) from the Sun and 83 mm from Earth.

Two nights later, Tuesday night the

5th, our intrepid star gazers will again be out at Cahas looking for what we hope will be a visually enhanced object. At that time the comet will appear at the 9 o'clock position relative to Spica, still about 4 degrees away. It will be about 140 mm from the Sun, and 85 mm from Earth. Its coordinates will be 13:41.3 and -10:17.3.

If the weather is lousy for either night, don't despair. You can catch the comet to the west toward Jupiter's direction before Sunday. It will appear to be directly above Spica on June 30th. You can also see the comet after the fifth, moving to the east. Its increased brightness should last for a few days, at least. Happy viewing! †

## **TWO DUDES AND A BABE - CONJUNCTION TIME**

*By Michael Overacker, RVAS Vice President*

The articles were abundant. The predictions were promising. Near the end of the month of June, in the year 2005, Mercury, Venus, and Saturn (Two Dudes and a Babe) would appear near each other in the western sky after sunset. That was good enough for both me and Mark Hodges. We decided to track and photograph the conjunction.

We started our quest on the evening of Thursday, June 23rd, at our RVAS observing site at the first overlook on the Blue Ridge Parkway/Explore Park Spur Road. The evening was warm and hazy. The infamous inversion layer over the "bowl" we call the Roanoke Valley was stubbornly entrenched, given the fact that winds have been non-existent lately. Nonetheless, as the twilight drew on, the planets started to appear through the haze. Venus first, quickly followed by Mercury,

and lastly, Saturn appeared to the naked eye. Cameras started firing, comments on each others skills filled the air, and very quickly, the planets started to fall into the muggy, pollution soup over Roanoke. In the summer, it is obvious that light pollution is not the only pollution that needs to be addressed by our local governments.

Friday, June 24th sent us to different locations for observation. I was working at the Fire Station that day, so my shooting was done at the Roanoke Regional Airport. Mark had set up his cameras once again at the Explore Park Road overlook. I spent the evening watching and photographing the conjunction with my fellow firefighters. They were interested in the conjunction, but seemed to be more at ease talking about women, garages, and food. Don't get me wrong, I am interested in

those subjects as well, especially the first, but astronomy time is astronomy time. Mark had a visitor at the overlook and spent some of his time in outreach, teaching a fellow named Doug about the conjunction and, after the western planets dipped into a low cloud layer, about Jupiter. After getting the images we could, given the atmospheric conditions, I set into the station to get ready for bunk-out and I am guessing Mark either went home or visited one of his girlfriends.

Saturday evening arrived and I convinced Mark to consider going up to the Great Valley Overlook, as it has a nice western view that might get us above the haze. Mark finally agreed and we headed up the mountains northeast of Roanoke. I am glad we did, because it was a beautiful sunset

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## AHSP 2005

*Continued from Page 1*

With regard to NOVAC's first star party - they have some work to do on execution. They didn't have enough volunteers to run the show. They had great plans, but not much of a way to implement them. Registration was haphazard, and we never knew whether we were talking to people who worked at the Mountain Institute or people from the Northern Virginia club. We had to chase down people to answer our questions. When Mary Beth & Mike arrived on Friday afternoon, there was no one knowledgeable present at the registration site, so they were given no parking pass and no door prize tickets. Because of the weather, a large portion of the expected crowd did not show up, including at least one speaker. This caused schedule changes for the programs, meals, etc. The only people who were informed of the schedule changes were those who bought their meals from the Mountain Institute. Participants who cooked their own food and stayed in the camping area during mealtime relied upon friends who kept them advised of the changes in scheduling and venues.

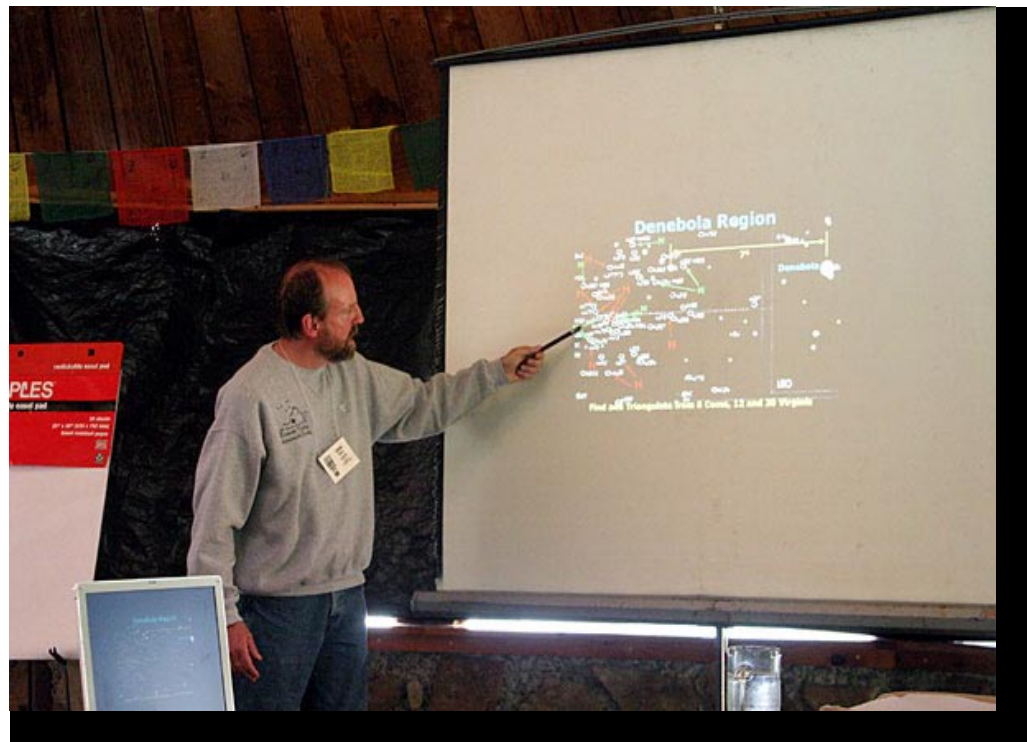
Fortunately, I found out when John Goss's talk was going to take place, and he did a masterful job of discussing the Herschel objects and how to go about finding them. I'm glad I got to hear it - his was the only talk I attended, so I can't report on the other discussions. John also spoke at the MERAL (Mid-East Region/Astronomical League) meeting - Mike Overacker was in attendance there.

Little by little, the weather improved, until by Saturday night, we thought there might be

some stargazing, after all. That afternoon, scopes came out one by one, like the stars do. The main camping/stargazing field had a wonderful, unobstructed view of the entire sky. However, clouds kept coming and going, frustrating people who were looking at an object, only to see it disappear. When the sky completely clouded over, I gave up, packed up, and went to bed. Mike Overacker went back to Roanoke. I had just started to doze off when I heard Paul Caffrey whispering outside my tent for me to come outside. Getting dressed in the dark is not my forte. I couldn't tie my boots and I couldn't find my glasses, but when I finally lurched out into the open, WOW. The clouds had suddenly evaporated. John, Paul and I spent a long time out there using just binoculars, and John was picking out star clusters in Sagittarius

like marshmallows out of a box of Lucky Charms. The Milky Way was splashed all the way across the sky, and we could see dark divisions in it - something I've never seen at Cahas, even with my glasses on. The teapot didn't just have steam coming out of it - it was completely enveloped in the Milky Way. John was trying to decide just how dark it was, comparatively speaking, and whether it would be worth making the trip again; I'm not sure what his conclusion was.

This new star party reminded me of the nursery rhyme about the little girl with the curl in the middle of her forehead. When she was good, she was very, very good, but when she was bad, she was horrid. There wasn't much middle ground at AHSP 2005 - so the 2006 version can only look up. Pun intended. ✦



*John Goss, MERAL Chair and former President of RVAS, does his presentation on tips and techniques to help fellow astronomers find those tiny, elusive, Herschel objects. The talk was well attended and one of the best presentations at the Almost Heaven Star Party.*

## CONJUNCTION

*Continued from Page 4*

that day and the planets were easier to spot and photograph above the haze in the I-81 corridor. The images seemed clearer and the overall view from the Great Valley location seemed to suit our subject best.

Sunday evening our plan was to hit the Great Valley Overlook again.

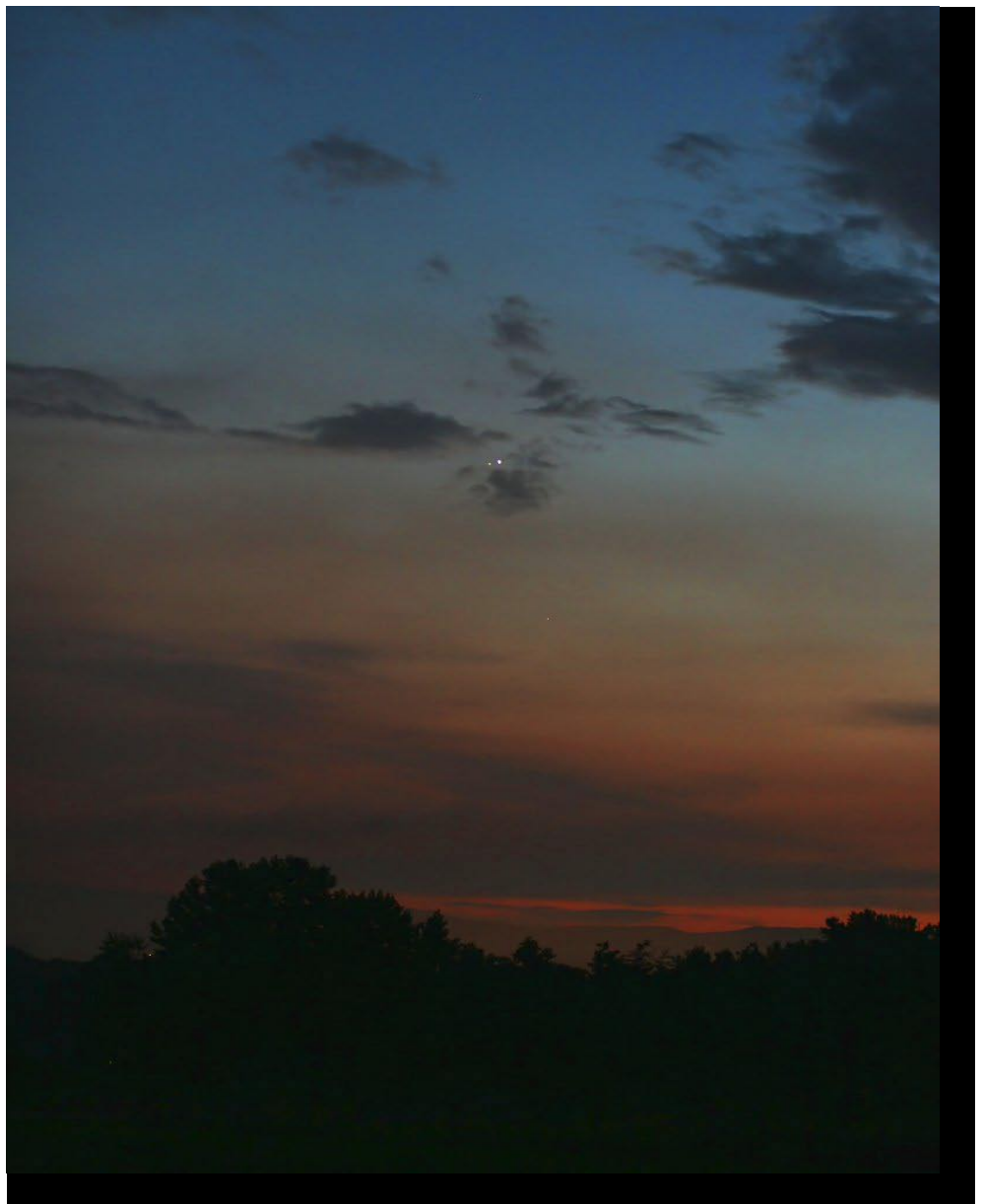
This time it wasn't anywhere close to the night before. It was clouded over completely, but south looked like there was a break in the cloud cover. We packed up the cameras and headed down to the Explore Park Overlook. We arrived at the Explore Park Overlook to find Marks new friend, Doug, already watching what he could see of the conjunction. There was a small break in the clouds, and we managed to see and image Venus and Mercury for a few brief moments before the clouds obstructed the view. We never did see Saturn on Sunday evening.

We went home early that night. Monday evening. The day of promise, as this, they said, would be the best day. We agreed again on the Great Valley Overlook, but as we were preparing to leave our homes and head up the mountain, the area was rocked by a severe storm that dumped over 2 inches of rain at my house in about half an hour. The storms were moving northeast, so I figured by the time we got to the Great Valley Overlook, the storm should be past us to the east. No such luck this evening. I arrived at the overlook to find Mark already there in the fog and mist. We waited for a while, but the soup seemed to be getting worse. I informed Mark that the sun was starting to shine in southwest Roanoke as I was heading out, so we headed south again to the Explore Park Overlook. My hunch

was right and as soon as we neared Vinton, the western sky was clearing up nicely. We arrived at the Explore Park Overlook to find a relatively clear western sky, with a threatening, dark sky to the northeast. Mercury was on the other side of Venus tonight, and Saturn was farther away from the pair than anytime before.

Personally, I would say that Thursday, Friday, and Saturday showed the best grouping of the planets. After another nice sunset and some photographs of the wide pairing of planets, we decided that this will be the end of chasing this conjunction. I had

a blast. I got some camera time, some nice shots, and spent some astronomy time with a great friend. Folks, it doesn't get much better than that, at least in my book. Club members that do not take advantage of going out with club members for organized, or impromptu, gatherings are missing one of the greatest things that this club has to offer. Camaraderie and sharing astronomical experiences is great fun, and relaxing as well. I highly recommend it to all RVAS members. If you want to be contacted about upcoming gatherings, be sure to let us know. We will give you a yell if anything develops. †



† Photo by Mark Hodges

# UPCOMING EVENTS

## **GREEN BANK STAR QUEST II - GREEN BANK, WV - JULY 6-10, 2005**

Combining Optical and Radio Astronomy at One Event!

Come join us July 6th-10th, 2005 under the very dark skies of West Virginia for the 2nd annual Green Bank Star Quest at the National Radio Astronomy Observatory in Green Bank, WV . By day checkout all the NRAO has to offer, like the new multi-million dollar Visitor's Center, and free tours of the facilities: including the 100 meter GBT – which is the world's largest fully steer able radio telescope. Star Quest will have 4 days of lectures, imaging classes, vendors, raffles, kids activities and nighttime optical observing on over six acres of camp sites at the low price of \$ 75.00 for a party of two or \$ 100.00 for a family. For more information contact Joe Gonzalez at (304) 626-5012 or visit our web site at [www.greenbankstarquest.org](http://www.greenbankstarquest.org)

Register before 3/15/05 to receive a 10% discount off your total registration fees, just write Early Registration Deal on the registration form and submit it before 3/15/05!!

## **RINGS AND A VEIL: IT'S NOT JUST FOR BRIDES - MIDDLETON, VA - JULY 11, 2005**

The JPL Solar System Ambassador and Shenandoah Astronomical Society Member Mark Klosinski will present Saturn and its moon Titan and why this 6th planet from the sun is so fascinating. FREE TO THE PUBLIC on Monday, July 11th, 7:30 p.m., Lord Fairfax Community College, Middletown, Virginia. Directions: <http://home.worldnet.att.net/~shenastro/> or George at 540-843-0989. Mark Klosinski is an amateur astronomer for the past 13 years, involved with the Roper Mountain Science Center and the T.C. Hooper Planetarium where for 9 years he operated the Digistar II. Now in his sixth year as JPL Solar System Ambassador, the program put him in the direction of education and public outreach.



## **ALCON EXPO 2005 - KANSAS CITY, MO - AUGUST 12-13, 2005**

The Astronomical League is proud to announce the 2005 annual convention to be held in Kansas City, August 12-13, 2005.

The League's Council meeting will be held August 11 at the National Office, our first council meeting at the facility. There will also be an astronomical trade show and vendor exposition, a Star-B-Q at Powell Observatory, and a private exhibition at the Linda Hall Library where you can hold a Galileo first edition and read Herschel's journal. Our goal will be to increase participation by astronomers and companies and to make this the best trade show we've ever hosted. The meetings, annual awards banquet, trade show, and speakers will all be held at the Overland Park, Kansas, Sheraton Hotel and Convention Center.

For information about the hotel, call 913-234-2100,

or toll free 866-837-4214. Be sure to mention the Astronomical League for a discount rate.

For additional information, contact Mr. Carroll Iorg, 7241 Jarboe Street, Kansas City, MO 64114. Phone 816-444-4878 or e-mail Carroll at: [Carroll-Iorg@kc.rr.com](mailto:Carroll-Iorg@kc.rr.com).



## **VAAS 2005 - VIRGINIA WESTERN COMMUNITY COLLEGE - ROANOKE, VA - NOVEMBER 5, 2005**

RVAS is happy to announce that Roanoke is the host city for the Annual Convention of the Virginia Association of Astronomical Societies (VAAS). This years convention will be held at Virginia Western Community College on Saturday, November 5th, 2005. Speakers are John Davis from Rochester, NY; Johnny Horne from Wilmington, NC; Dr. Dwight Holland from Roanoke, VA; and Michael Good from Roanoke, VA.. We already have a wide selection of door prizes to be given away at the event, plus more are coming in. This is a "Must Attend" event for any astronomy enthusiast.

For more information, please visit the website at: <http://www.vaas2005.com>

# ***Society Events and Activities for July 2005***

**MONTHLY MEETING:** Monday, July 18th, 7:30 p.m. Fifth floor meeting room, Center In The Square, Roanoke. The evening's program will be presented by David Scaer, a professor at Roanoke College. His presentation will be "A Quick and Easy Guide to Satellite Spotting in the Roanoke Valley".

**"MEMBERS ONLY" WEEKEND OBSERVING SESSIONS:** Unless otherwise noted, observing sessions are held at Cahas Mountain Overlook, milepost 139 on the Blue Ridge Parkway.

Friday and Saturday, July 1st and 2nd. Sunset is at 8:44 p.m. Astronomical twilight ends at 10:37 p.m. The Moon sets at 4:39 and 5:44 p.m., respectively.

Friday and Saturday, July 29th and 30th. Sunset is at 8:30 p.m. Astronomical twilight ends at 10:13 p.m. The Moon rises at 1:25 and 2:04 a.m., respectively.

**August Sessions:** 5th and 6th; 26th and 27th. (Note: Perseid Meteor Shower Watches possible the nights of Thursday, August 11/12th and Friday, August 12/13th.)

**FRANKLIN CO. PARKS DEPT./RVAS PUBLIC STARGAZE:** Next session: August 27th, 8:30 p.m., FCRP.

**ROANOKE CITY PARKS DEPT./RVAS PUBLIC STARGAZE:** Saturday, July 2nd, 9:15 p.m., Cahas Overlook, milepost 139, Blue Ridge Parkway. For City, County and other area residents; RVAS members welcome to participate. Call the RVAS Message Line, 540-774-5651, for information. (Next session: August 6th, 9:00 p.m., Cahas Overlook.)

**RVAS EXECUTIVE COMMITTEE MEETING:** To be announced.

Roanoke Valley Astronomical Society  
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Roanoke, VA 24018