



# RVAS

Roanoke Valley Astronomical Society



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

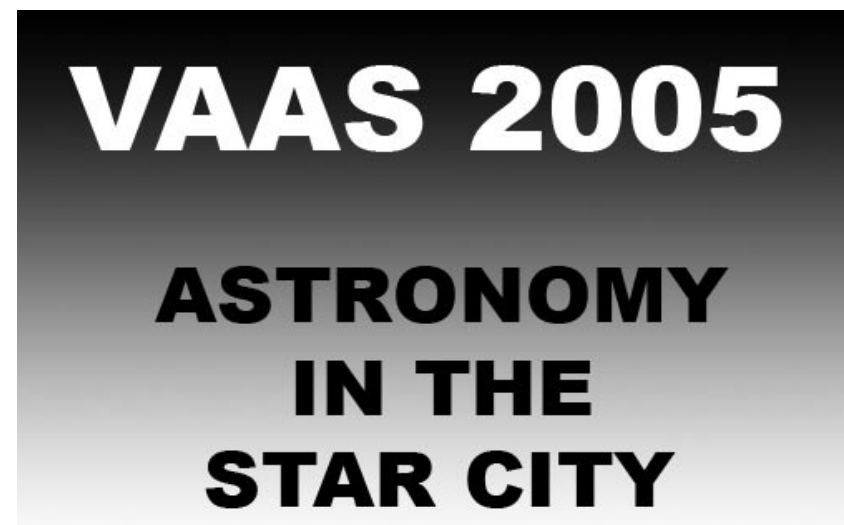
Vol. 22 - No. 6

June 2005

## **VAAS 2005 IN ROANOKE - A CALL TO ARMS**

*By Michael Overacker*

The Virginia Association of Astronomical Societies (VAAS) has an annual convention, and the site rotates between four cities: Charlottesville, Norfolk, Richmond, and Roanoke. Roanoke is the site of the 2005 VAAS Convention. I have been working on the convention preparations since October of 2004. Katherine Hix and Michael Good have been working hard as well on the project. We have lined up 4 excellent speakers for the event. John Davis will be coming to speak from his home in Rochester NY. John was the winner of the Astronomical Leagues "Young Astronomer" Award for his work on building an equatorial mount. I met John at NEAF in April 2005 and he is looking forward to speaking at the event. Johnny Horne will be speaking as well. Johnny is a well known astrophotographer and is well rounded in his astronomical knowledge. He will be coming in from Wilmington NC, where he writes for his local newspaper. Dr. Dwight Holland will be speaking at the event, but his topic has not been finalized. Michael Good teaches astronomy on the college level and will speak on



**VIRGINIA ASSOCIATION OF ASTRONOMICAL SOCIETIES**

astrophotography.

I have acquired quite a few door prizes for the event, and I fully expect more to be added to the list.

What we do not have so far is a reasonable amount of members willing to assist in making this a successful event. The current needs are:

Registration Coordinator and staff

Food Coordinator and staff

Prize Ticket Sales Coordinator

Other positions will be added as needed. I would like to see

at least 15 RVAS members

actively involved in this event.

This is an excellent opportunity

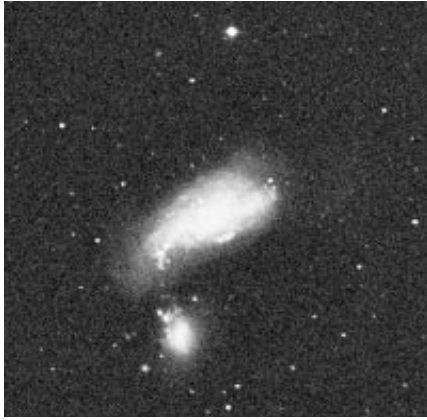
for the less active members to

take a step into the limelight and

help the club with your hidden talent. There is a small active group of members in the club that are involved in almost all the club functions. I know that not everyone can help out the club, but I sure would like to see that small group become a bigger group. We have some younger members that I am sure could add a bit of a contemporary flair to this event, and I would love to discuss their ideas with them. Again, I am asking members to step up and help us keep this ball rolling and help make this VAAS event the best in VAAS history. We can do it. I know it in my heart. I just need our membership to know it in their hearts as well. †

# MAY 2005 RVAS MEETING NOTES

By Carol Messimer



## MYSTERY OBJECT

This object could be ready to produce a beautiful Butterfly?

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

thomasde-ka8inl@worldnet.att.net

Attendance: 25  
Treas: \$1640 checking \$7000 CD

Membership dues are currently due to be paid for the upcoming year. Sky & Telescope calendars will be available for \$7.00.

Clark Thomas and Michael Overacker spoke on their recent observations on Cahas.

Astronomy Day was rained out.

Upcoming events: Saturn, Summer Triangle rising, June 25/26 Venus, Saturn, Mercury in the WNW 45 min after sunset. June 21, Lyrid meteors

Discussion on the club needing a Publicity officer.

Program for 5/16/05

Maggie Anderson - Honey, You Are My Shining Star, The effect of Light Pollution on Star Gazing Using Orion, at 5 different sites, Maggie kept charts on how many stars were visible.

Katherine Hix presented Maggie with an honorary RVAS membership.

Fred Hoffman - Planetary GIS

Fred gave a very interesting description and power point presentation on the use of GIS here in the Roanoke Valley, as well as on Mars. Great website to tinker around in, a person could spend hours doing this. †

## ASTRO-QUIZ

Suppose you had an eyepiece and didn't know its true field of view. How might you determine this at night?

Answer to Last Month's Astro-Quiz: Last month we asked if you traveled to the star Mintaka, toward what constellation would you need to look to find Earth? Mintaka's right ascension is 5h 32m. Since it happens to be located almost directly on the Celestial Equator, the projection of Earth's equator onto the sky, its declination is roughly 0 degrees and the answer is very straightforward. If you were on Mintaka, a straight line from it and through Earth would intersect the Celestial Equator opposite—or 12 hours of right ascension—from Mintaka, at 17h 32m. This point is in the constellation Ophiuchus. The general case for a star not on the celestial equator must take into account the declination of the star, and is left for the reader to ponder.

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 Roanoke. 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 for making reservations and travel arrangements for AlCon Expo 2005 in Kansas City. No bargains have appeared recently for airfare between Roanoke and Kansas City (MCI).

Some club members have already made reservations from Raleigh (RDU), since the price for a round trip ticket from there has been running around \$160. Dulles (IAD)

is a close second with fares of \$174 plus fees. The event follows a new expo format this year and will take place the weekend of August 12.

Please see the Upcoming Events on Page 5 of this newsletter (or <http://www.astroleague.org/>).

Please contact John or Genevieve Goss if you will be available and interested in participating in one of our club Night Sky Network events at an area library this summer. No advanced knowledge of astronomy

or special skills are required; training will be provided.

RVAS has received kits and lesson plans from Night Sky Network which provide interesting tools to illustrate concepts and guidelines for how to present them. The presentations will be given by small teams of RVAS members and may include some solar, lunar or planetary observing. ✦

## LAST MONTH'S MYSTERY OBJECT

The mystery object for the month of May is the edge-on spiral galaxy NGC 4565 in Coma Berenices.

Also known as the "Needle Galaxy", NGC 4565 shines at magnitude 9.6. It is located at RA 12h 36.3m and at Dec. 25 degrees 59 minutes at a distance of 31 million light years.

The Needle is visible in 4 inch scopes as a streak with a bulge in the center. Larger scopes will show more detail such as the dark dust lane along the equator.



## \*\*\* 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.

## TWO COSMIC ODDITIES - BLAZAR QUASAR

By Clark Thomas

I find Sol's planets beyond Earth boring. Sorry! There are so many more cool objects "out there" of interest, if only we look for them. Yes, a lot of them are too distant and dim for any amateur equipment, but a large amount of interesting oddities are there to see with medium-sized amateur telescopes. Even smaller scopes with CCDs can access a great deal of the really cool stuff.

In this centennial of Einstein's three 1905 articles there are objects professional astronomers have used to test his theories. Some of them are available to us, if only we look. One of the most interesting test objects is called Markarian 421. It is a blazar. A blazar is a quasar with its jet (remember M87?) pointing at us, which is a chance event.

Markarian 421 is a visible object in Ursa Major, and I saw it recently from Cahas on a transparent night with fairly good seeing. Here is an image of this object, with a line drawn through it, taken from the Skyhound's site <http://www.skyhound.com/sh/skyhound.html>. You can read his excellent explanation of this object, and get the coordinates, by going to this URL, and then clicking on the "Focus On..." button:



This image, most likely of DSS origin, is similar to what I saw, but it shows a better separation than I got with my 16" Newt. I did, however, see an elongated fuzzy object. Maybe a night of superb seeing would have allowed me to separate the quasar/blazar galaxy from its smaller companion galaxy which is providing the "fuel" for the supermassive black hole of the quasar galaxy. If this object were much more distant, it would have appeared as quasi-stellar.

Here is a really superb image of what these two look like, taken by Aimo Sillanpaa, using the Nordic Optical Telescope. No portable amateur scope can see this much:



I believe that any good eight-inch scope can see Markarian 421 during a great night. A scope greater than ten inches can see the fuzziness of the host object, which appears to be elliptical. Separating the stretched companion object is a challenge under Virginia's skies.

Markarian 421 is similar to the well known blazar galaxy, 3C 273, often touted as the brightest quasar. That one too is visually accessible in Virginia to medium-sized telescopes.

Open Globular

We are familiar with the concept of open clusters and globular clusters. What about globular clusters that appear as open clusters? Actually, they are out there for our eyes to enjoy. One of the more challenging globulars of this type is about one degree from Messier 53, itself a nice "standard" globular. NGC 5053 is now high in the sky in early evening, so you can see it from a dark site with a medium-sized scope on a very transparent night. (It's not apparently far from Markarian 421, so why not go for both?)

Here's a fine image from the Digital Sky Survey (POSS2/UKSTU), showing the object in Newt perspective at 120x:



You can star hop from M53 in Coma Berenices to a "bright" 10th magnitude star next to 5053. Your challenge will be to see this cluster at all, because it only has the luminosity of 16,000 stars spread out over a moderate area, with no bright core. Ironically, this "globular" is roughly the same distance as the much brighter, and larger, M53. If you see anything more than a dim glow, with maybe a few stars, consider yourself a Big Game Hunter.

## 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!!



### **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 June 2005***

**MONTHLY MEETING:** Monday, June 20th, 7:30 p.m. Fifth floor meeting room, Center In The Square, Roanoke. The evening's program will be Southern Sky Observing: Myth and Reality." John and Genevieve Goss will talk about their observations of the sky at a latitude of -30 Degrees.

**"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, June 3rd and 4th. Sunset is at 8:37 p.m. Astronomical twilight ends at 10:28 p.m. The Moon sets at 5:40 and 6:46 p.m., respectively.

July Sessions: 1st and 2nd; 29th and 30th.

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

**ROANOKE CITY PARKS DEPT./RVAS PUBLIC STARGAZE:** Saturday, June 4th, 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: July 2nd, 9:15 p.m., Cahas Overlook.)

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

Roanoke Valley Astronomical Society  
3578 Berry Hill Drive  
Roanoke, VA 24018