



# RVAS NEWSLETTER



Vol. 24 No. 5

The Roanoke Valley Astronomical Society

May 2007

## RVAS member makes astounding discovery

By Dave Thomas

Roanoke, Virginia  
April 1, 2007

One of the most astounding discoveries of this or any other century was revealed at the April meeting of the RVAS.

While photographing the Sun



the RVAS member noticed an object that appeared to be transiting the solar disc. The silhouette was unmistakable, it was Saturn.

This will surely go down in the annals of astronomy as the first and only time a planet has been observed in the act of changing orbit. :-)

## April meeting featured photos, snacks and constellations

By Dave Thomas

April 16, 2007

The April membership meeting of the RVAS opened with a sparse turnout. Despite this it was a good meeting. The snacks and desserts were plentiful and delicious.

John Goss gave his usual interesting and informative presentation on the



Mark Hodges' prize winning astro photo

Deep Sky Object of the Month, galaxies M81/M82. Jeff Purri gave a good overview and history of Ursa Major (the Big Dipper).

The astro photo contest had seven entries. It was a tight contest with Mark

Hodges winning first place honors with a wide field of Orion and Mike Overacker taking second and third places.

### May Mystery Object



Photo by NOAO/AURA/NSF

This months mystery object is hard to see and hangs out with the bears.

Send your best guess to Dave Thomas: [ka-8-inl@hotmail.com](mailto:ka-8-inl@hotmail.com)

### Meeting notes from 4/16/2007

By Mark Hodges

Mike O. opened the meeting and John Goss presented the deep sky object of the month, there were two this month M81 & M82 .

Jeff Puuri presented the Constellation of the month, Ursa Major.

Jeff Suhr gave a treasurers report.

Mark Hodges reported on Astronomy Day which we will be observing on May 5th to coincide with the Strawberry Festival we will also be doing public observing on the Market that evening.

Mike O. reported the status of the ARF agreement and tele-

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### April Mystery Object



The Hockey Stick Galaxy was the mystery object for April . NGC 4656 in Canes Venatici is located in the sky at RA 12h, 44m and Dec +32 deg, 10m.

The galaxy shines at magnitude 10.4 from a distance of 30 million light years. It is visible in larger scopes and binoculars.

NGC 4656 gets its unusual shape from the tidal effects of a neighboring galaxy, NGC 4631.

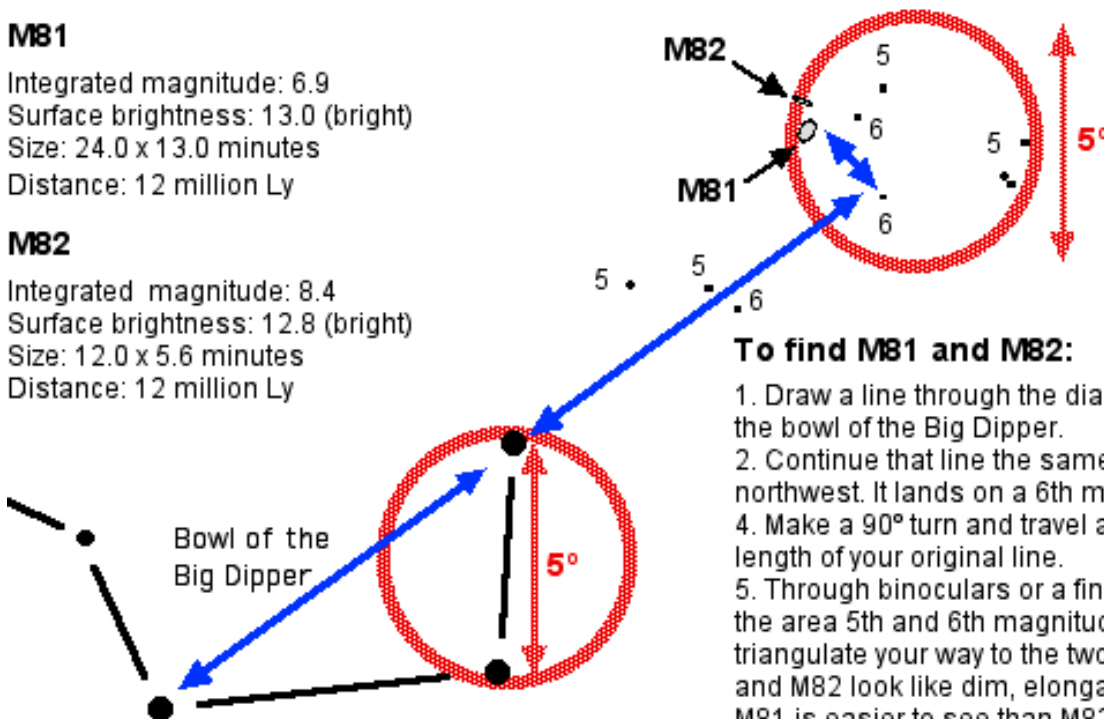
## Deep Sky Object of the Month: the galaxies M81, M82

#### M81

Integrated magnitude: 6.9  
 Surface brightness: 13.0 (bright)  
 Size: 24.0 x 13.0 minutes  
 Distance: 12 million Ly

#### M82

Integrated magnitude: 8.4  
 Surface brightness: 12.8 (bright)  
 Size: 12.0 x 5.6 minutes  
 Distance: 12 million Ly



#### To find M81 and M82:

1. Draw a line through the diagonal stars in the bowl of the Big Dipper.
2. Continue that line the same distance to the northwest. It lands on a 6th magnitude star.
4. Make a 90° turn and travel about 1/4 the length of your original line.
5. Through binoculars or a finderscope, use the area 5th and 6th magnitude stars to triangulate your way to the two galaxies. M81 and M82 look like dim, elongated smudges. M81 is easier to see than M82.

## Upcoming Events

### **Green Bank Starquest Green Bank, WV July 4-7, 2007**

One of the best star parties in our area, this event is in the shadow of the Green Bank Radio Observatory. Various speakers are scheduled including four of the original "Rocket Boys". For further information visit, [www.greenbankstarquest.org/](http://www.greenbankstarquest.org/)

### **Mason Dixon Star Party - Wellsville, PA- July 11-15, 2007**

The 18th annual Mason Dixon Star Party is for all members of the family. The location offers a flat and level camping/observing area with plenty of space. There will be workshops, speakers, field trips and raffle prizes for all ages. Camping areas, bunk houses, food, showers, and facilities, horse shoe pits, sand volley ball courts and a swimming pool. [www.YCAS.org](http://www.YCAS.org) and <http://www.masondixonstarparty.org/>

### **Society of Amateur Radio Astronomers Annual Meeting and Technical Conference to be held July 1-3, 2007 Green Bank, WV July 1-3, 2007**

Information on SARA web page  
<http://www.radio-astronomy.org>

*(Notes Continued from page 2)*

scope donation. The board has decided to withdraw the donation of the telescope, instead we will offer it to ARF for purchase (which they have done). Mike also reported that the club has purchased a liability insurance policy.

Katherine then began the Astrophoto contest and instructed everyone on how to vote for the photos.

Mike adjourned the meeting and we began eating snacks and voting on the astrophotos.

The contest winners were;

3rd place Mike Overacker Saturn transit

2nd place Mike Overacker there was a tie for Stars over the

Parkway and Comet McNaught  
1st place Mark Hodges Orion and Flame nebula

## Astro-Quiz

Hevelius is remembered as one of Astronomy's master star catalogers. Yet, in 1679, the accuracy of his positional measurements was called into question until verified by Halley. Why were Hevelius' measurements suspect?

**Answer to Last Month's Astro-Quiz:** Last month we asked which of the solar system's planets has moons that are all named for literary characters, and who the literary figures were that created the characters. The planet is Uranus, which has 27 moons. Of these, 21 have been named: Ariel, Belinda, Bianca, Caliban, Cordelia, Cressida, Desdemona, Juliet, Miranda, Oberon, Ophelia, Portia, Prospero, Puck, Rosalind, Setebos, Stephano, Sycorax, Titania, Trinculo and Umbriel. All were characters in the plays of William Shakespeare, except for Belinda and Umbriel, which were characters in a poem written by Alexander Pope.

The Roanoke Valley Astronomical Society is a membership organization of amateur astronomers dedicated to the pursuit of astronomical 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:** Mike Overacker, President/Webmaster (776-3092) Vacant, Vice President (000-0000); Mark Hodges, Secretary (774-5039); Jeff Suhr, Treasurer (563-0079); Dave Thomas, EC Member-At-Large (434-237-5135); Katherine Hix, Immediate Past President (334-2443); Paul Caffrey, Past President (345-2847)

**MONTHLY MEETING: Monday, May 21<sup>st</sup>, 7:30 p.m.** Fifth floor meeting room, Center In The Square, Roanoke. The guest speaker will be Dr. Matt Fleenor from Roanoke college. Dr. Fleenor will talk about the size and scale of the Milky Way and the Universe and the 1920 Shapley-Curtis debate about the same.

**"MEMBERS ONLY" WEEKEND OBSERVING SESSIONS:** Unless otherwise noted, observing sessions are held at Cahas Mountain Overlook, milepost 139 on the Blue Ridge Parkway. Note: The moon phases and weekends get out of synch this month, so only one weekend provides moon-free observing. Things get back to the normal two weekends next month.

-- **Friday and Saturday, 11<sup>th</sup> and 12<sup>th</sup>.** Sunset is at 8:48 p.m. Astronomical twilight ends at 10:01 p.m. The Moon rises at 3:31 and 3:58 a.m., respectively.

-- **June Sessions:** 8<sup>th</sup> and 9<sup>th</sup>; 15<sup>th</sup> and 16<sup>th</sup>

**FRANKLIN CO. PARKS DEPT./RVAS PUBLIC STARGAZE:** Next session: June 9<sup>th</sup>, 9:15 p.m., Franklin Co. Recreational Park)

**ROANOKE CITY PARKS DEPT./RVAS PUBLIC STARGAZE: Saturday, May 12th 9:00 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: June 16<sup>th</sup>, 9:15 p.m., Cahas Overlook.)

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**Roanoke Valley Astronomical Society  
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