NGC 6946, the “Fireworks Galaxy,” captured at GNTO on September 24, 2011. This galaxy is approximately 22 million light-years away and is located between the constellations Cepheus and Cygnus. Because it is located near the galactic plane, this galaxy is somewhat obscured by interstellar dust and gas.

15 x 10-minute subs taken with an SBIG 4000XCM camera mounted on a 10” Meade LX-6 operating at 1600 mm focal length. The mount was a Losmandy G11. Processing was done in CCDSoft, CCDOps5, and Photoshop.

—Vance Ley

Long Baseline Optical Interferometry: An Old New Tool for High Angular Resolution

Saturday, November 12, at Regener Hall at 7:00 p.m. See the map on the last page of this issue.

DR. SERGIO RESTAINO of the Naval Research Laboratory will discuss the basic principles of Optical Interferometry at the November General Meeting of the Albuquerque Astronomical Society. The meeting, open to the public, begins at 7 p.m., Saturday, November 12, 2011, in Room 103 of UNM’s Regener Hall.

“An Old New Tool” will also cover the history of optical Interferometry, current programs and instruments, scientific results, and the future.

Dr. Restaino holds an MS in astrophysics from the University of Naples, Italy, and a PhD in physical optics from the University of Florence, Italy. He heads the Wavefront Sensing and Correction Section of the Remote Sensing Division of the Naval Research Laboratory.

He is author of more than 200 scientific papers and several books and books chapters on high angular resolution imaging. He is a Fellow of the International Society of Optical Engineers.
The MENTORSHIP program has been underway for several years now, thanks to the contributions of our mentor volunteers and the enthusiasm of the mentorees. It has been very successful, but we need to refresh the original plan and coordinate between the many members, new and old, who are looking for information and guidance from our very experienced amateur astronomers.

We would like to confirm our current mentors (applause, applause!) and recruit additional mentors to connect with applicants. Sometimes there is a request for help with a new telescope; sometimes a member has specific interests, such as planets or the moon or double stars, and many times, there is simply a need to become familiar with the heavens and general observing. We will try to make a match based on these goals, location and time available.

Members who are looking for instruction and assistance, who have not yet connected with a mentor, should also get in touch and let us know their interests.

Please contact me via the e-mail address below if you are currently involved with the mentor program or would like to become involved either as a mentor or mentoree. By mid-November, we should have enough information to enlarge the program so more mentorees can take advantage of the deep well of knowledge within TAAS.

Lynne Olson
events_coordinator@taas.org
THERE SEEMS to be an interesting new (to me) development at GNTO. While GNTO is a wonderful site, it’s a bit of a drive for most of our members. As a result, we tend to use the facility only once or twice a month for “official” events. Recently, though, there have been some TAAS members who have decided to remedy this underutilization. Last month, we had two impromptu Flash observing events at GNTO, on Saturday, October 1, and Friday, October 28. Thanks to the support of Karen Keese and Carl Frisch, who are now our nearby mesa neighbors, TAAS members attending these events can usually use the entire facility (Ortega Building—heated warming shack!). These Flash deep-sky observing events are yet another great reason to join TAAS, but you have to sign up on the TAAS-L e-mail list (see instructions on our Web page) to find out about them. Last month’s Flash co-conspirators included Vance Ley, Alan Scott, Will Ferrell, and Steve Riegel (sorry to those I left out!), and a good time was had by all. Keep your eye on TAAS-L if you want to play!

Unfortunately, I was unable to attend our official October GNTO new moon observing event, due to travel commitment for a family reunion (some people have their priorities screwed up, don’t they?). This event, officially named The TAAS 200 Scavenger Event, occurred on October 28, the weekend before Halloween and is reported elsewhere in this issue. Also known as Will’s Wild Feral Forty, and by several other aliases, it was well attended and hosted by Merlin (aka Will Ferrell), with the able assistance of Lisa Wood (who I guess was Merlin’s familiar?). From the reports I received, it sounds like I missed a really great event. That I was carrying the torch for GNTO by taking the GNTO Video Astronomy Outreach equipment on a plane to Colorado along with my backpack Meade ETX-80, and had a fabulous family star party event of my own. I showed my relatives (from as far away as Australia) the Moon, M13, Jupiter and the Galilean moons, and M57, etc. With my little 80mm scope from downtown Boulder, Colorado, I was easily able to see down to 16th magnitude on the monitor with a four-second integration on the GNTO Stellacam 3 camera, once again demonstrating how great this setup is.

We had a great GNTO committee meeting on October 27, with pizza, Sarsaparilla, and the usual great conversation and company at Ray Collins’ comfortable compound. Thanks again to Ray and his wife for hosting us and supplying us with a delicious salad from his amazing garden. We discussed the desirability of an upgrade to our aging CCD camera. I’d appreciate recommendations from TAAS members with CCD equipment or related experience or knowledge—call or e-mail me if you can help. As always, the GNTO committee meetings are open to any TAAS members. Our next meeting is December 1, but you should stay tuned to TAAS-L or e-mail me directly, just in case. This is a great way to become involved with the running of your observatory. We need all the help we can get, since it does indeed take a village to run an observatory.

GNTO is open to all TAAS members and their guests and we have at least one or two observing night gatherings every month, weather permitting. With cold weather approaching, you will appreciate the warm and comfortable Robert Ortega Building, and our guest trailer next to the dome is always open with coffee, hot continued on page 8…
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**A Halloween Treat**

Mike Molitor

I HAD READ about amateurs setting up their scope on Halloween and sharing the view with the ghosts and goblins. I always wanted to try it. This year, the four-day-old Moon cooperated fully, and I set out my 4-inch refractor on the front patio.

What pleasant surprise!

Hawking “Treats for the eyes, treats for the tummy,” I found there were very few who did not take a look through the scope. There were many ooohs and aaahs . . . and many thank-yous. The chaperones were equally enthusiastic, effusively so sometimes.

It was very rewarding, so perhaps give it a try next year.
### TAAS General Meeting

**Saturday, November 12, 2011, 7:00 P.M.**  
Regener Hall  
University of New Mexico  
(See map, back page)

**Long Baseline Optical Interferometry**  
An Old New Tool for High Angular Resolution

**Dr. Sergio Restaino of the Naval Research Laboratory**

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### Notes

**TAAS =** The Albuquerque Astronomical Society.  
**Hotline** 254-TAAS (8227).

**GNTO =** General Nathan Twining Observatory  
**GNTO Training =** GNTO Observing and Training  
**GNTO NM =** New Moon Premium Observing Night

**UNM =** University of New Mexico Observatory.  
Call the TAAS hotline @254-8227, or the UNM hotline @ 277-1446 to confirm, or unm_coordinator@taas.org.

**ATM =** Amateur Telescope Making. Call Michael Pendley for information @ 296-0549, or atm@taas.org.

**P & A =** UNM Physics and Astronomy Building, Corner of Lomas and Yale  
**SIG =** Special Interest Group  
**TBA =** to be announced  
**Blue Italics =** Non-TAAS events

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Merlin Appears at GNTO Contest: Several Astronomers Hopping Mad

by Lisa Wood

ON THE evening of October 29, the TAAS 200 Scavenger Hunt was just a hare too cold for some, but several expert observers leaped ahead of the pack winning genuine faux gold and bronze medals. Gordon Pegue, Steve Riegel, Alan Scott, and Dee Friesen found all 40 objects, taking gold, and taking bronze medals were Amy Estelle, Kevin McKeown, Will Ferrell, and Barry Spletzer.

While those using navigation devices were breeding resentment amongst the hard-core observers who employed maps only, let me paws to remind all that no rules regarding method were announced.

About the time Event Host Will Ferrell disappeared, Merlin, in full beard with wand appeared, turning several smart-aleck astronomers into jackrabbits. They are hopping around the GNTO field now, and frankly, this reporter is surprised anyone was left to complete the contest.

Evidence of their hare-brained attitudes is quoted in the following murmurs heard about the field:

GREG DILLON: It’s warm out here; I want a Popsicle.

ELYSE WOOD: My foil hat is not working.

BARRY SPLETZER: As I stand here among the camaraderie of my fellow astronomers, basking in the dim light of billions of suns under a velvety, ebony hued sky, I pluck from these celestial jewels the faint glimmers that have traveled unimaginable distances to intersect with me tonight. How can one help but be overwhelmed by the grandeur and majesty of this spectacle? Instead, I tend to notice mostly that my fingers are cold.

And of course GORDON PEGUE’S humble quip: Even if I star-hopped I’d beat you all.

Very bunny indeed.

Naturally, I was all ears when it came to the more serious comments:

WILL FERRELL: I enjoyed the event because I was able to get a few objects I could not get at Okie-Tex.

LARRY CASH: It was fun to star-hop again (a rarebit of foolishness.)

DEE FRIESEN: My new feather-touch focuser is working fantastically.

Amy Estelle: Spectacular. I really appreciate all the work people put into this (a warm fuzzy sentiment).

REBEKAH BENNETT AND DEAN HAYES: I was so gratified at how eager to help everyone was! As a fairly new astronomer, I was worried about keeping up with the pros, but everyone was so welcoming and helpful.

STEVE RIEGEL: 253 in Sculptor was incredible.

KEVIN McKEOWN: It’s been very fun, and clear, and….

Suddenly I dropped my angora mittens in the dark and the rest of my quotes became illegible due to the cold night air. My apologies to Alan and Tom and the others.

The event wrapped up with Will awarding the medals. Merlin disappeared with the cake, but he was likely famished, since most of the evening he was busy first forcing a bright moon below the horizon and then dissipating clouds that threatened the night. Thank goodness he was there. As for taking the cake….we didn’t carrot all.

continued on page 8…
M31, M32, and M110 galaxies in Andromeda

Equipment: AT72ED f/6, iOptron iEQ45 Mount, SBIG ST8300M FW5, autoguider SBIG SG-4 with AT102ED f/7. RGB 30:40:40 x1minute. Software: CCDSoft V5, Photoshop Elements V9, and new Nebulosity V2.4. Taken October 1, 2011, at Fort Crag, NM.

—John Laning
September clouds,  
October rain.  
What’s next? November stars? We hope.

OUR OCTOBER star party at Ernie Pyle Middle School was a great success in spite of rainy conditions and the total absence of real stars. This was intended to be a Category 1 star party with all the bells and whistles. Kevin McKeown gave the Starlab Planetarium presentations. Joanna delivered and set up the planetarium and had everything ready for Kevin. Bob Havlen, Bob Hufnagel, and Tom Grzybowski gave classroom presentations. John Laning provided a stellar slide show that was well appreciated, especially in the absence of starry skies.

Outside we had zero telescopes. In spite of the weather, over 150 students and family members attended.

Thanks to all our TAAS volunteers who made this a success. Also thanks to the school team for their support and the generous donation.

IN NOVEMBER we have two star parties scheduled. The first is a Category 1 on November 1 at Griegos Middle School. The second, November 15 at Reginald Chavez Elementary School, was planned as a Category 3 (telescopes only) but has been upgraded to Category 1 with all the trimmings.

Please come out and support these rewarding and fun activities.

Thank You—Your TAAS Education Committee—Tom Davies, Trish Logan, Tom Grzybowski
Welcome to New or Returning TAAS Members

MICHAEL FLORES

JIM KAMINSKI

MITCHELL KLASS

SETH MOORE

BOB QUINN

Explanation of Dues and Membership Renewal Date

New members will be posted as beginning the first day of the month regardless of what day during that month the check is received. Notice of renewal will be sent out the month before the due date. You will have until the end of the month after your renewal date to send your membership check.

If you fail to pay and renew at that time, your membership will lapse. When you pay on a lapsed membership you will be reinstated in the month that the membership was originally due. (If dues were due in March and you did not renew until May or June or July, etc., the date of your renewal will be in March. If your dues are due in April and you pay in March, your membership will still be renewed in April.)

In a nutshell, if you pay late or early your membership date stays the same and your next year’s dues will be due on that date next year.

—Dan Clark

Monthly Membership Report

September 2011

Membership | Current Month | Past Month | Change
---|---|---|---
Regular | 203 | 216 | -13
Family | 57 | 68 | -11
Educational | 9 | 13 | -4
Military | 3 | 3 | 0
Total Paid | 272 | 300 | -28
Honorary | 7 | 7 | 0
Complimentary | 39 | 41 | -2
Total Members | 318 | 348 | -30

Editor’s Note

The deadline for the next issue of The Sidereal Times is Friday, November 25. The newsletter editor’s e-mail address is editor@taas.org.

Text: E-mail text as an attachment, preferably in Microsoft Word or compatible format.

Photos: Caption and credit needed. Attach photos or graphics in separate graphics files. Photos or graphics in Word files are no longer acceptable.

Location, Location, Location

• Chaco Canyon•

6185’ elevation
Latitude  Longitude
36° 01’ 50”N  107° 54’ 36”W
36.03’  -107.91’
36° 1.83’  -107° 54.60’

• Oak Flat•

7680’ elevation
Latitude  Longitude
34° 59’ 48”N  106° 19’ 17”W
34.99’  -106.32’
34° 59.80’  -106° 19.28’

• UNM Campus Observatory•

5180’ elevation
Latitude  Longitude
35° 5’ 29”N  106° 37’ 17”W
35.09’  -106.62’
35° 5.48’  -106° 37.29’

For security reasons, GNTO location is available by request only, so please contact Pete Eschman or Steve Welch for GNTO information.

Membership Services

for:
•Membership Inquiries
•Events Information
•Volunteer Opportunities

Contact Bill Firth at membership@taas.org

for:
•Membership Dues
•Magazine Subscriptions
•Address/e-mail changes

Contact Dan Clark at treasurer@taas.org

P.O. Box 50581
Albuquerque, NM 87181

The Official Newsletter of The Albuquerque Astronomical Society
This image of sunrise over the Sandias was shown on Channel 4 on October 24 during the weather segment of the 10 p.m. news. It was taken on October 11, 2011, from my place in northwest Albuquerque.

—Bill Firth
The Albuquerque Astronomical Society
P.O. Box 50581
Albuquerque, NM 87181-0581

<table>
<thead>
<tr>
<th>Name</th>
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<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Snider</td>
<td>President</td>
<td>snider423 at yahoo.com</td>
</tr>
<tr>
<td>David Blair</td>
<td>Vice President / General Meeting Coordinator</td>
<td><a href="mailto:vp@taas.org">vp@taas.org</a>, 505-296-9632, 505-205-9562 (C)</td>
</tr>
<tr>
<td>Arthur VanDereedt</td>
<td>Secretary / Librarian</td>
<td><a href="mailto:secretary@taas.org">secretary@taas.org</a>, vandeta at msn dot com, 505-821-0530</td>
</tr>
<tr>
<td>Dan Clark</td>
<td>Treasurer</td>
<td><a href="mailto:treasurer@taas.org">treasurer@taas.org</a>, 505-771-4346 (H)</td>
</tr>
<tr>
<td>Ray Collins</td>
<td>Director / ATM Coordinator</td>
<td><a href="mailto:atm@taas.org">atm@taas.org</a>, ray at rinzai dot com, 505-344-9686 (H)</td>
</tr>
<tr>
<td>Tom Davies</td>
<td>Director / Education Coordinator</td>
<td><a href="mailto:education_coord@taas.org">education_coord@taas.org</a></td>
</tr>
<tr>
<td>Bob Havlen</td>
<td>Director</td>
<td>505-856-3306</td>
</tr>
<tr>
<td>Melissa Kirk</td>
<td>Director</td>
<td>505-385-0113</td>
</tr>
<tr>
<td>Lynne Olson</td>
<td>Director / Events Coordinator</td>
<td><a href="mailto:events_coordinator@taas.org">events_coordinator@taas.org</a>, 505-856-2537</td>
</tr>
<tr>
<td>Dave Pitonzo</td>
<td>Director</td>
<td>dpitonzo at comcast dot net, 503-939-3297</td>
</tr>
<tr>
<td>Steve Riegel</td>
<td>Director / Public Relations</td>
<td><a href="mailto:pr@taas.org">pr@taas.org</a>, 505-274-3362</td>
</tr>
<tr>
<td>Steve Welch</td>
<td>Director / Observatory Director</td>
<td><a href="mailto:gnto@taas.org">gnto@taas.org</a>, 505-866-7668 (H)</td>
</tr>
<tr>
<td>Daniel Zirzow</td>
<td>Director / UNM Observatory Coordinator</td>
<td><a href="mailto:unm_coord@taas.org">unm_coord@taas.org</a>, dzirzow at unm dot edu</td>
</tr>
</tbody>
</table>

Archivist: Pat Appel
ATM Coordinator: Ray Collins
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Archivist: archivist@taas.org
ATM Coordinator: atm@taas.org
ATM Coordinator: 505-344-9686 (H)
Dark Sky Coordinator: darksky@taas.org
Education Outreach: education_coord@taas.org
Events Coordinator: events_coordinator@taas.org
Grants Coordinator: grants@taas.org
Librarian: librarian@taas.org
Membership Chair: membership@taas.org
Newsletter Editor: editor@taas.org
Observatory Director: gnto@taas.org
Public Relations: pr@taas.org
Telescope Loan Coordinator: telescope_loans@taas.org
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The Official Newsletter of The Albuquerque Astronomical Society
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MEMBERSHIP: You may request a membership application by sending e-mail to membership@taas.org or calling (505) 254-TAAS (8227). Applications may also be downloaded from the Web site. Annual dues to The Albuquerque Astronomical Society are $30/year for a full membership and $15/year for a teacher, student (grades K-12), or military membership. Additional family members may join for $5/each (teacher, student and family memberships are not eligible to vote on society matters). New member information packets can be downloaded from the Web site or requested from the TAAS Membership Services Director at membership@taas.org. You may send your dues by mail to our newsletter return address with your check written out to The Albuquerque Astronomical Society or give your check to the Treasurer at the next meeting.

MAGAZINES: Discount magazine subscriptions to Sky and Telescope and Astronomy as well as discounts on books from Sky Publishing Corporation are available when purchased by TAAS members through our society. Include any of the above magazine renewal mailers and subscription payments as part of your renewal check. Make checks out to TAAS (we will combine and send one check to the publisher). Warning: publishers take several months to process magazine subscriptions.

ARTICLES/ADVERTISEMENTS: Articles, personal astronomical classified advertisements and business card size advertisements for businesses related to astronomy must be submitted by the deadline shown on the Society calendar (generally the Friday near the new Moon). Rates for commercial ads (per issue) are $120 per page, $60 per half page, $30 per quarter page, $7 for business card size. The newsletter editor reserves the right to include and/or edit any article or advertisement. E-mail attachments in Microsoft Word, 11 point Palatino, justified, no indent at paragraph beginning, one space between paragraphs is preferred. ASCII and RTF are acceptable. One column is approximately 350 words. Contact the Newsletter Editor at editor@taas.org for more information.

CHANGE OF ADDRESS: Note that the Sidereal Times is mailed at a first class mail rate. As a result, the newsletter may be forwarded to your new address should you move, or it may not!! Please provide the Treasurer (treasurer@taas.org) with your new mailing address or e-mail address to ensure that you receive your newsletter.

TAAS LIBRARY: Please contact the Librarian at librarian@taas.org or 890-8122 to check out a book or make a contribution.

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- Online Sidereal Times
- Educational Outreach
- Programs: TAAS 200, Equipment Trader, Telescope Loaner Program, and more
- SIGs
- Members Guide
- Links to Astronomy Resources and Members’ Blogs

E-mail: taas@taas.org