September 2019

Observing our Desert Skies since 1954



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ASSOCIATION

ASTRONOMY

AMATEUR

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Events Bullet owthuy

September 6th General Meeting

Steward Observatory Lecture Hall, Room N210, UA Campus, 933 N Cherry Ave.

Location Change for September General Meeting

We are back at our usual location in the Steward Observatory Lecture Hall

Introductory Presentation 6:30pm Two Talks: Dark Sky NM Observatory and Bylaw Changes presented by Greg Ruppel & Doug Smith, TAAA Members Speaker 1: TAAA member Gregg Ruppel will talk about his Dark Sky New Mexico Observatory near Animas, NM.

Speaker 2: TAAA member Doug Smith will provide information about two suggested TAAA Bylaws changes.

Invited Lecture 7:30pm Testing Einstein's Gravity by Taking Photographs of Black Holes presented by Pierre Christian Ph.D., University of Arizona

Pierre Christian is a postdoc at the University of Arizona, where he is the Steward Prize Fellow in theoretical and computational astrophysics. Previously, he earned his doctorate from Harvard University, where he worked on black hole astrophysics. At UA, he is interested in using black holes to study gravitational physics. He is a member of the Event Horizon Telescope collaboration, a worldwide scientific effort to take resolved images of black holes.

Pierre will describe the recent effort of the Event Horizon Telescope (EHT) collaboration in taking a highresolution image of the black hole at the center of supergiant galaxy M87. He will first explain what a black hole is according to Einstein's gravitational theory of general relativity. Then he will describe how a worldwide array of radio telescopes was used to capture an image of a black hole, and how such experiments can be used to test our understanding of gravity.

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TAAA BoD Meeting Sep 11

> AFSIG Meeting Sep 12

SIMSIG Meeting Sep 16

Ladies Night Out Sep 19

AISIG Meeting TBD

CAC Star Party Sep 20 & 21

TIMPA Star Party Sep 21 & 27



Upcoming Activities

This worth's Events				
Key:	TAAA Members Only	For Organization	Public Events	
	neral Meeting Smith	Sep 6 (Fri) Steward Observatory 933 N Cherry	6:30 PM	
AFSIG Meeting (Beginners) Connor Justice		Sep 12 (Thu) Ward 6 Office 3202 E 1st St	6:30 PM	
SMSIG Meeting Terri Lappin		Sep 16 (Mon) Fronimo's 3242 E Speedway Blv	6:30 PM d	
	ies Night Out an O'Connor	Sep 19 (Thu) Dolce Vita 1800 E Ft. Lowell Rd a	6:30 PM #168	
We	reach Star Party st Tucson Knoll	Sep 20 (Fri) Cooper Center (Cats After Dark) 5403 W Trails End Rd	6:30 PM	
	C Star Party e McDowell	Sep 20 & 21 (Fri/Sat) CAC 9313 E Perseus Way	Sunset	
	PA Star Party nis McMacken	Sep 21 (Sat) TIMPA 3250 N Reservation R	Sunset	
Ora	lic Star Party cle Knoll	Sep 21 (Sat) Oracle State Park 3820 E Wildlife Dr	7:00 PM	
	PA Star Party mis McMacken	Sep 27 (Fri) TIMPA 3250 N Reservation R	Sunset	
NE	lic Star Party Tucson Knoll	Sep 28 (Sat) Agua Caliente Park 12325 E Roger Rd	6:30 PM	
October Member Events				
Oct	4 (Fri)	General Meeting		
Oct	9 (Wed)	Board Meeting		
	10 (Thu)	AFSIG Meeting		
Oct 17 (Thu) Ladies Night Out				
October Outreach Events				
Oct	: 5 (Sat)	Catalina State Park		
Oct	: 5 (Sat)	World Space Week		
Oct	: 5 (Sat)	International Observe t	he Moon Night	
Oct	5 (Sat)	Fall Astronomy Day		
Oct	15 (Tue)	Sabino High School		
Oct 18 (Fri) Esmond Station K - 8				
Oct 19 (Sat) Boy Scout STEM Jamboree			oree	
Oct 19 (Sat) CAC Evening Under the Stars				
Oct 19 (Sat) Chiricahua National Monument			nument	
Oct 20 (Sun) Young Life Non-Profit				
Oct 24 (Thu) E		Esperero Canyon Middle School		
Oct 28 (Mon)		Fucson International Academy		

This Month's Events

Announcements

- The September Board of Directors Meeting will be held on Wednesday, September 11th, at 6:30 PM at Banner UMC Hospital, Room C off the hospital cafeteria. Members are welcome to attend.
- Have you signed up for Member Planet? This is where the TAAA Member's Only online information can be found. It's where you can learn about member's events, renew your membership online, renew magazine subscriptions, pay Astronomical League membership dues, and update your contact information. For information about accessing this information through Member Planet, send an email to membership[at]tucsonastronomy.org.
- Immediate need for applicants for two positions: 1. Webmaster or 2. Member Database Manager. To express interest send name, contact information, which position you are interested in, and list of qualifications to NVRCchair@tucsonastronomy.org. Volunteer needed to edit and post video-recordings of Member Meetings.
- Web comments, suggestions or problems, contact our team atwebteam@tucsonastronomy.org.
- Monthly Bulletin deadlines are the 15th of the preceding month. Email all submissions to taaa-newsletter[at]tucsonastronomy.org
- Equipment Loaner program. Contact Ralph Means at elc@tucsonastronomy.org, or 520 460-8770 or bookbuyer1769@gmail.com to check out a telescope, lenses or other equipment. You may try one type or size of telescope, return it, and try another one until you have tested all the scopes in our loaner program. Very helpful for choosing a first telescope or for moving to a new option.



Current Campaign: Cygnus & Sagittarius Sep 20 - Sep 29

Visit globeatnight.org

Special Interest Group (SIG) Activities

Astronomy Fundamentals SIG (AFSIG)

Meeting: September 12 (Thu) 7:00 PM

Ward 6 Office – East Room 3202 East 1st Street (off of Country Club and Speedway) Contact: Connor Justice Group Email: fundamentals[at]tucsonastronomy.org Leader Email: Elliot.c.justice[at]gmail.com

Come join us for a presentation from the fundamentals of amateur astronomy. Connor Justice will start the night with the southern constellation **Delphinus** and **Equuleus**. For our main topic, Doug Smith will be teaching the basics of **Star Hopping**.

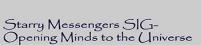
The AFSIG is looking for people to present future "Constellation of the Month", whether it is an old favorite or a constellation you would like to learn more about. Also, do you have a topic the would help us become better or more knowledgeable observers? Present it at the AFSIG. Let Connor know, so we can schedule you in. Is there a topic you would like to hear about or do you to present but need help finding a topic? Shoot us an email at fundamentals[at]tucsonastronomy.org

The AFSIG, is for all TAAA members who want to learn about and share the multiple aspects of the hobby. It is not just for beginners or new members.

Room: The AFSIG meeting will be held in the east room of the Ward 6 Building which is located across the road from the Walgreens. Please enter through the door on the back side of the building. The front door is locked during off hours.

Parking: Parking is available along the curb of the building and on the backside of the building. Parking is also available at the Walgreens store across the street from the office.





6:30 PM

Meeting: September 16 (Mon)

Contact: Terri Lappin Phone: 520-977-1290 Email: smsig@tucsonastronomy.org

The Starry Messengers will hold our first meeting of the season on Monday, September 16th. We will meet at Fronimo's at 6:30pm and be done by 8pm. Anyone interested in astronomy outreach should attend SMSIG meetings. Please arrive a bit early to order if you'll be eating something.

Starry Messengers plan the TAAA's major, local outreach events where we do interactive, hands-on activities with kids and adults. This is a great alternative to bringing a telescope to a community star party. Our goal is to provide hands-on activities to all who request them. We've not reached our goal, but we know we can if we get additional TAAA members involved in this worthy program.

At the Sept 16th meeting, we'll discuss our exhibit for the UA ScienceCity. The application deadline is very soon. We've had preliminary discussions over the summer, but we must define the theme of our exhibit and start developing an activity that kids can do. We'll also get an update on our Library Telescope program and we'll discuss how we will utilize the set of Galileoscopes in our possession.

Astro-Imaging SIG (AISIG)

Meeting: TBD

Location: Total Wine and More (4370 N Oracle) Contact: Gregg Ruppel Group email: astro-photo[at]tucsonastronomy.org Leader email: ruppel0709@gmail.com

The August meeting focused the November Mercury Transit and solar filters. Other topics will include favorite weather websites for checking the weather before setting up for imaging, Picture sharing and discussion, with discussion on September's topic selection.

If you are interested in astro-imaging, in being involved in planning, or in learning about it, please participate in these meetings. To assist with AISIG planning and organization, contact Gregg Ruppel.

Member Star Parties

The TIMPA observing site is located a few miles beyond the Desert Museum. The CAC observing site is located in southeast Arizona near Sunsites, AZ, about 1.5 hours drive from Tucson. Maps to both sites can be found on the TAAA website. Locked gates protect both sites. Call or email the contact person to learn when the gate will be unlocked.

Chiricahua Astronomy Complex

Sep 20 & 21 (Fri & Sat)

Contact Person/RSVP to: Mike McDowell Email: cac-director[at]tucsonastronomy.org Phone: 206-356-6624

Chiricahua Astronomy Complex (CAC) is the club's dark observing site, located in Cochise County approximately 100 miles southeast of the center of Tucson. The site includes concrete telescope pads with electricity, a roll-off roof observatory with a Celestron 14" telescope, a picnic Ramada, and a full bathroom facility with shower room. The new Reynolds-Mitchell Observatory includes a 40" telescope and a large warm room. At an elevation of 4800 feet, be prepared for cooler temperatures. Try to arrive before sunset. Our use permit limits the number of attendees at any one time, so reservations and cancellations are required. If you would like to attend, you must contact CAC Director Mike McDowell. Reservations are on a first come – first serve basis. You need to reserve for both nights if observing both nights.

TIMPA

Sep 21 & 27 (Sat & Fri)

Contact Person: Dennis McMacken Email: fundamentals[at]tucsonastronomy.org Phone: 520-609-7860

The AFSIG hosts the TIMPA star parties. An AFSIG representative will open the gate for an evening of viewing. The Gila Monster Observatory with its Meade 14" Schmidt-Cassegrain telescope will be open for your viewing pleasure. The TIMPA site features a large parking area and full restroom facilities. Be prepared for cool temperatures after sunset. Guests are welcome, accompanied by a TAAA member. We hope to see you there!

TAAA Outreach Events

Members are asked to support these outreach events. Details and maps can be obtained by logging into your Member Planet account. Sign up at a meeting, respond to Jim Knoll's email requests, or pick up the phone. Signing up is important so you can be contacted in case of cancellation. Contact Jim at school-sp-volunteers@tucsonastronomy.org or 520-241-3113. If interested in being an Astronomy Guide and presenting projects from the Night Sky Network Outreach Toolkits, contact Terri Lappin at smsig@tucsonastronomy.org.

Cats After Dark Star Party @ Cooper CenterSep 20 (Fri)Set-up: 6:30 PMFar West TucsonObserving: 7:00 PM to 9:00 PMLeader: Jim KnollVolunteers Needed: 3Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for the University of Arizona group Cats After Dark. About 50 students are expected to attend. The Cooper Center is located at 5403 W Trails End Rd. Take Camino de Oeste north from Speedway and turn west onto Trails End Rd. Setup in the open area near restroom facilities. Access the site from the dirt road at the east end of the main parking lot near the dumpsters. **Three volunteers with scopes are needed for this event.**

TAAA Outreach Events (Cont.)

Oracle State Park Public Star Party				
Sep 21 (Sat)	Set-up: 6:00 PM			
Oracle	Observing: 7:00 PM to 9:00 PM			
Leader: Jim Knoll	Volunteers Needed: 4			
Cross Streets: Oracle (AZ 77)/Wildlife Dr				

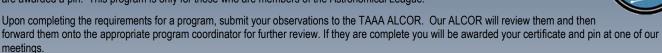
We are supporting a public star party at Oracle State Park. About 100 people attend these star parties. The park is located at 3820 E Wildlife Dr. Take Highway 77 (Oracle Rd) north from Tucson and follow the signs. Observing will be at the sidewalk along the Kannally Ranch House parking lot and on the Ranch House upper patio. Four volunteers with scopes are needed for this event.

Agua Caliente Park Public Star Party				
Sep 28 (Sat)	Set-up: 6:30 PM			
NE Tucson	Observing: 7:00 PM to 9:00 PM			
Leader: Jim Knoll	Volunteers Needed: 3			
Cross Streets: Roger/Soldier Trail				

We are supporting a public star party at Aqua Caliente Park for the Pima County Natural Resources, Park & Recreation. About 75 people attend these regularly scheduled star parties at the Agua Caliente Park. The park is located at 12325 E Roger Road. This is near Soldier Trail. Setup will be at the bus lanes at the north end of parking lot. **Three volunteers with scopes are needed for this event.**

Astronomical League Observing Programs

The Astronomical League Observing Programs are designed to provide direction for your observing, teaching you skills useful for the full enjoyment of our hobby. Each program has a set of requirements. Upon completion of the requirements, you qualify for a certificate and are awarded a pin. This program is only for those who are members of the Astronomical League.



For more information, ask our ALCOR or visit http://www.astroleague.org/observing.html

Beginner Programs

- Binocular Double Star Program
- Binocular Messier Program
- Constellation Hunter Program
- Dark Sky Advocate Award
- Deep Sky Binocular Observing Program
- Galileo Observing Program
- Lunar Observing Program
- Messier Observing Program
- Meteor Observing Program
- Outreach Observing Award
- Sketching Observing Award
- Sky Puppy Program
- Solar System Observing Program
- Southern Skies Binocular Program
- Universe Sampler Program

Our ALCOR is Doug Smith

Intermediate Programs

- ♦ Advanced Binocular Double Star Observing Progam
- Asteroid Observing Program
- ♦ Caldwell Observing Program
- Carbon Star Observing Program
- ♦ Comet Observing Program
- Double Star Observing Program
- Earth Orbiting Satellite Observing Program (EOSOC)
- Globular Cluster Observing Program
- ◆ Lunar II Observing Program
- Open Cluster Observing Program
- Planetary Transit Special Observing Award
- Southern Skies Telescope Observing Program
- Sunspotters Observing Program
- Stellar Evolution Observing Program

Advanced

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- Advanced Binocular Program
- Analemma Observing Program
- ♦ Arp Peculiar Galaxies Northern Observing Program
- ♦ Asterism Observing Program
- Bright Nebula Observing Program
- ♦ Dark Nebula Observing Program
- Galaxy Groups and Clusters Observing Program
- ♦ Herschel 400 Observing Program
- Herschel II Observing Program
- Hydrogen Alpha Solar Observing Program
- NEO Observing Program
- Occultation Observing Program
- Planetary Nebula Program Observing Program
- Radio Astronomy Observing Program