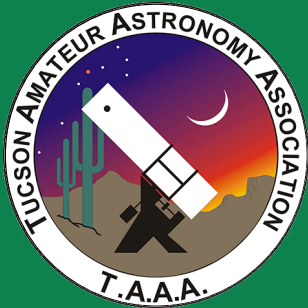


January 2018

Observing our Desert Skies
since 1954



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TUCSON AMATEUR ASTRONOMY ASSOCIATION

Monthly Events Bulletin

January 5th General Meeting

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

Introductory Presentation

6:30pm

Objects of the Quarter

presented by

Dr. Mary Turner,

TAAA Chief Observer

In her latest popular sky talk, Mary Turner takes us on a tour of the winter night sky. With the use of astronomical data, images, and mythology, Mary provides an overview of what to expect in the sky during the coming months.

Invited Lecture

7:30pm

The Latest News About

Water on Mars

presented by

Dr. Shane Byrne,

Associate Professor at LPL

Dr. Shane Byrne is an Associate Professor at the LPL. He is a co-Investigator on the HiRISE and CaSSIS cameras at Mars and a Guest Investigator on the Dawn mission at Ceres. Dr. Byrne is also the director of the Space Imagery Center, a NASA Regional Planetary Image Facility that archives planetary spacecraft and telescopic data and conducts many outreach events.

Dr. Byrne will talk about the search for water on Mars. It remains a major unifying theme of Mars exploration because water is required for Martian life as well as for future human exploration. Evidence for liquid water has waxed and waned over the years for both modern and ancient Mars. Dr. Byrne will describe the ups and downs of this quest for Martian water, and how every few years new observations overturn old theories.

New Director for Chiricahua Astronomy Complex (CAC)

As you know John Kalas is retiring as of December 31st after 10 year of service as CAC Director. The new CAC director is Mike McDowell. Mike is a relatively new TAAA member, having relocated from Seattle one year ago. Mike has a lifelong interest in astronomy, staring out grinding mirrors and helping run a planetarium. His current interests include imaging and finishing the construction of a roll off roof observatory in his back yard. Mike brings a professional background in project development and management.

As CAC director, Mike is leading a team of TAAA volunteers who will be responsible for the operation, maintenance and continued development of this remarkable dark sky site. Volunteers will be involved in supporting monthly star parties, community star parties and outreach, TAAA socials at CAC, maintenance, observatory operations and management of future projects.

There are exciting volunteer opportunities and Mike and his team will be delighted to match your interests with CAC projects and activities. For further information about volunteer opportunities contact Mike: cac-director@tucsonastronomy.org or John Mead: jmead@siu.edu.

CAC Users: please note that Mike McDowell is now the contact for making all reservations or cancellations. Contact Mike at cac-director@tucsonastronomy.org or 206-356-6624.

And speaking of CAC reservations, an online reservation system is being developed and will be rolled out in early 2018. Watch for announcements about this new system.

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Jan 13 & 19

SMSIG Meeting
Jan 15

Ladies Night Out
Jan 18

This Month in Brief

Usual set-up time for most group and public events is 30 minutes before the start time stated here.

General Meeting Ben Bailey	Jan 5 (Fri) Steward Obs. Rm N210 933 N Cherry Ave	6:30 PM
AFSIG Meeting (Beginners) Dennis McMacken	Jan 11 (Thu) USGS Bldg Room 253 520 N Park Ave	6:30 PM
Outreach Star Party West Tucson Jim Knoll	Jan 11 (Thu) Camp Cooper 5403 W Trails End Rd	6:30 PM
Outreach Star Party SE Tucson (Vail) Jim Knoll	Jan 12 (Fri) Vail Academy/High School 7762 E Science Park Dr	6:00 PM
Outreach Star Party Central Tucson Jim Knoll	Jan 12 (Fri) University High School 421 N Arcadia	6:00 PM
CAC Star Party John Kalas	Jan 12/13 (Fri/Sat) Chiricahua Astronomy Complex	Sunset
TIMPA Star Party Dennis McMacken	Jan 13 (Sat) TIMPA 3250 N Reservation Rd	Sunset
SIMSIG Meeting Terri Lappin	Jan 15 (Mon) Beyond Bread 3026 N Campbell Ave	6:30 PM
Outreach Star Party West Tucson Jim Knoll	Jan 16 (Tue) Tucson Intern'l Academy 2700 W Broadway Blvd	6:00 PM
Outreach Star Party West Tucson Jim Knoll	Jan 18 (Thu) Camp Cooper 5403 W Trails End Rd	6:30 PM
Ladies Night Out Susan O'Connor	Jan 18 (Thu) Wild Garlic Grill 2870 E Skyline Dr # 120	6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 18 (Thu) Green Fields Day School 6000 N Camino de la Tierra	6:00 PM

Key:	TAAA Members Only	For Organization	Public Events
Outreach Star Party NW Tucson Jim Knoll	Jan 19 (Fri) Big Brothers Big Sisters 3974 N Tucson Blvd	6:00 PM	
TIMPA Star Party Dennis McMacken	Jan 19 (Fri) TIMPA 3250 N Reservation Rd	Sunset	
Public Star Party NW Tucson (Oracle) Jim Knoll	Jan 20 (Sat) Catalina State Park 11570 N Oracle Rd	6:30 PM	
Public Star Party NE Tucson Jim Knoll	Jan 20 (Sat) Agua Caliente Park 12325 E Roger Rd	6:30 PM	
Outreach Star Party SE Tucson (Vail) Jim Knoll	Jan 23 (Thu) Old Vail Middle School 13299 E Clossal Cave Rd	5:30 PM	
Outreach Star Party SE Tucson (Vail) Jim Knoll	Jan 25 (Thu) Cottonwood Elem School 9950 E Rees Loop	6:00 PM	
Outreach Star Party West Tucson Jim Knoll	Jan 25 (Thu) Camp Cooper 5403 W Trails End Rd	6:30 PM	
Outreach Star Party NW Tucson Jim Knoll	Jan 25 (Thu) Mesa Verde Elem School 1661 W Sage St	6:00 PM	
Outreach Star Party Downtown Tucson Jim Knoll	Jan 25 (Thu) Carrillo Elem School 440 S Main Ave	6:00 PM	
Public Star Party Far West Tucson Jim Knoll	Jan 27 (Sat) Ironwood Picnic Area 7300 West Hal Gras Rd	6:00 PM	
Outreach Star Party South Tucson Jim Knoll	Jan 29 (Mon) Utterback Middle School 3233 S Pinal Vista	6:15 PM	
Outreach Star Party Far West Tucson Jim Knoll	Jan 30 (Tue) Vesey Elementary School 5005 S Butts Rd	6:00 PM	

Future Events

Member Events	
Feb 2 (Fri)	General Meeting
Feb 8 (Thu)	AFSIG Meeting
Feb 10 (Sat)	TIMPA Star Party
Feb 15 (Thu)	Ladies Night Out
Feb 16 (Fri)	TIMPA Star Party
Feb 16/17 (Fri/Sat)	CAC Star Party
Feb 21 (Wed)	Board Meeting

Outreach Events	
Feb 1 (Thu)	St Elizabeth Ann Seton
Feb 9 (Fri)	University HS Astronomy Club
Feb 10 (Sat)	Tucson Star Party With Astronomy Magazine
Feb 15 (Thu)	Legacy Traditional School
Feb 15 (Thu)	Coyote Trail Elementary School
Feb 17 (Sat)	Agua Caliente Park
Feb 24 (Sat)	Ironwood Picnic Area

Astronomical Events in Our Community

Below is a list of astronomy presentations in the Tucson area, mostly on the UA campus. For more information, visit the websites listed. Take advantage of these opportunities. Miss an event? Many lectures are available on the web. Visit the listed website to find out.

Date/Time	Speaker	Title	Location	Information
Jan 8 Mon 7:30PM	Dr. Thomas Fleming Steward Observatory	<i>Lessons in Astronomy: There's no Place Like Dome!!</i>	Steward Observatory Lecture Hall N210	http://www.as.arizona.edu/public-evening-lecture-series
Jan 22 Mon 7:30PM	Dr. Jerry Sellwood Steward Observatory	<i>Spirals in Galaxies</i>	Steward Observatory Lecture Hall N210	http://www.as.arizona.edu/public-evening-lecture-series

Special Interest Group (SIG) Activities

Astro-Imaging SIG (AISIG)

Meeting: Next meeting TBA

Location: Total Wine & More (4370 N Oracle Rd)
Contact: Jim Heasley Phone: 520-268-8586
Email: astro-photo[at]tucsonastronomy.org

The next meeting of the AISIG is yet to be determined.

Astronomy Fundamentals SIG (AFSIG)

Meeting: Jan 11 (Thu) 6:30 PM

U.S.G.S. Building, Room 253 (520 North Park Ave)
Contact: Dennis McMacken Phone: 520-609-7860
Email: fundamentals[at]tucsonastronomy.org

Come join us for a presentation from the fundamentals of amateur astronomy. At the January meeting Doug Smith will discuss "Variable Stars". The "Constellation of the Month" is Perseus, presented by Jim Schrode.

Dennis and Bill Yohey are 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 Bill or Dennis know, so we can schedule you in. Is there a topic you would like to hear about? Let us know, also. The Astronomy Fundamentals Special Interest Group, is for all TAAA members who want to learn about and share the multiple aspects of the hobby.

The USGS Building is on the northeast corner of Park and 6th Street. Free parking is available nearby after 5pm. The closest free parking is on the south side of 6th Street. An elevator is available on request. Contact Dennis McMacken at phone number or email above.



Starry Messengers SIG
Opening Minds to the Universe

Next Meeting: Jan 15 (Mon) 6:30PM

Beyond Bread (3026 N Campbell)
Contact: Terri Lappin
Phone: 520-977-1290
Email: smsig@tucsonastronomy.org

Interested in spreading the fun of astronomy? Volunteer as an Astronomy Guide. Training is available and you'll be partnered with a seasoned Astronomy Guide at the event of your choice.

Plans are underway for our "Place in the Universe" exhibit at the 2018 Tucson Festival of Books/UA ScienceCity on March 10 & 11. We hope to increase people's awareness of how big the universe is through pictures, explanations, and discussions. There will also be activities for kids. This will be the primary discussion at our Jan 15th meeting.

Other upcoming outreach activities are the Math Moves You Galileoscope Building event with Raytheon (Feb 1), award presentations at the Southern AZ Region Science Fair (Apr 12), Innovator's Night (Apr 13), and the TAAA Astronomy Festival (Apr 22). In addition, we have requests for Night Sky Toolkits at several community star parties over the next few months. For information or to help these events, contact Terri Lappin (see above).

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

Jan 12 & 13 (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 John Kalas. Reservations are on a first come – first serve basis. You need to reserve for both nights if observing both nights.

TIMPA

Jan 13 & 19 (Fri & Sat)

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 Ladies Night Out

Thursday, January 18

Great Conversation!

6:30 pm

Delicious Food!

Wild Garlic Grill

2870 E Skyline Dr #120

(SW corner of Skyline & Campbell in the former location of Shlomo and Vito's)

Preview menu at wildgarlicgrill.com

RSVP Susan at 520-546-2961 or cyzeh@aol.com

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 smsg@tucsonastronomy.org.

Borton Elementary School Star Party @ Cooper Center
Jan 11 (Thu) Set-up: 5:30 PM
Far West Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Borton Elementary School at the Cooper Center for Environmental Learning. About 50 students and their family members are expected. 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.

University High Astronomy Club Star Party
Jan 12 (Fri) Set-up: 5:00 PM
Central Tucson Observing: 6:00 PM to 8:00 PM
Leader: Jim Knoll Volunteers Needed: 5
Cross Streets: Swan/5th St

The University High Astronomy club is having a star party for 25 students. The school is co-located with Rincon High School which is located at 421 N Arcadia near. University High is at the south side of the campus. Setup on the practice field next to the football field. **Three more volunteers with scopes are needed for this event.**

Vail Academy & High School Star Party
Jan 12 (Fri) Set-up: 5:00 PM
SE Tucson (Vail) Observing: 6:00 PM to 7:30 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: Kolb/Science Park Dr

Vail Academy and High School is having a star party for 100 students. The school is located at 7762 E Science Park Dr. From I10 & Kolb go N on Kolb to Science Park Dr and turn E to the school. Set up on the soccer field. **Two more volunteers with scopes are needed for this event.**

Tucson International Academy Star Party
Jan 16 (Tue) Set-up: 5:00 PM
West Tucson Observing: 6:00 PM to 8:00 PM
Leader: Jim Knoll Volunteers Needed: 5
Cross Streets: Greasewood/Broadway

Tucson International Academy is having a star party for 300 students. The school is located at 2700 W Broadway. S Houghton Rd, south of Sahuarita Rd. From I10 and St Mary's, go W on St Mary's, which becomes Anklam, to Greasewood. Go S on Greasewood to Broadway and turn Right. The school is on the N side of the street. Set up on the front parking lot. **Four more volunteers with scopes are needed for this event.**

Green Fields Country Day School Star Party
Jan 18 (Thu) Set-up: 5:00 PM
NW Tucson Observing: 6:00 PM to 8:00 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Orange Grove/Camino de la Tierra

Green Fields Country Day School is having a star party for 60 students. The school is located at 6700 N Camino de la Tierra. Set up on the quad in the center of the campus. **Two more volunteers with scopes are needed for this event.**

Thank You Volunteers!

Potential Contacts This Month: 2035

Volunteers Needed This Month: 66

Sam Hughes Elementary School Star Party @ Cooper Center
Jan 18 (Thu) Set-up: 5:30 PM
Far West Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 2
Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Sam Hughes Elementary School at the Cooper Center for Environmental Learning for 55 students. 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. **Two volunteers with scopes are needed for this event.**

Big Brothers Big Sisters Star Party
Jan 19 (Fri) Set-up: 5:30 PM
Central Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Tucson Blvd/Prince

The Big Brothers Big Sisters is having a star party for 75 people at Rio Vista Natural Resources Park located at 3974 N Tucson Blvd. Setup is on the grassy field next to the parking lot. **Two more volunteers with scopes are needed for this event.**

Catalina State Park Public Star Party
Jan 20 (Sat) Set-up: 5:30 PM
NW Tucson Observing: 6:30 PM to 9:30 PM
Leader: Jim Knoll Volunteers Needed: 10
Cross Streets: Oracle (AZ 77)/Tangerine

The TAAA is co-hosting a public star party at Catalina State Park. About 200 people attend these quarterly star parties. The park is located at 11570 N Oracle Rd. Observing will be at the trailhead picnic area at the end of the road into the park. Scopes are generally set up at the western end of the parking area. **Six more volunteers with scopes are still needed for this event.**

Agua Caliente Park Public Star Party
Jan 20 (Sat) Set-up: 5:30 PM
NE Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Roger/Soldier Trail

We are supporting a public star party at Agua Caliente Park for the Pima County Natural Resources, Park & Recreation. About 50 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. **Four volunteers with scopes are needed for this event.**

Old Vail Middle School Star Party
Jan 23 (Tue) Set-up: 5:00 PM
SE Tucson (Vail) Observing: 5:30 PM to 7:30 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Mary Ann Cleveland/ Colossal Cave

Old Vail Middle School is having a star party for 300 students. The school is located at 13299 E Colossal Cave Rd. Set up on the field on the north side of the school. **Three more volunteers with scopes are needed for this event.**

TAAA Outreach Events (cont.)

Collier Elementary School Star Party @ Cooper Center
Jan 25 (Thu) Set-up: 5:30 PM
Far West Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 2
Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Collier Elementary School at the Cooper Center for Environmental Learning for 35 students. 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. **Two volunteers with scopes are needed for this event.**

Cottonwood Elementary School Star Party
Jan 25 (Thu) Set-up: 5:00 PM
SE Tucson (Vail) Observing: 6:00 PM to 7:30 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Houghton/Rita Road

Cottonwood Elementary School is having a star party for 200 students. The school is located at 9950 Rees Loop. Go W on Rita Rd from Houghton and turn left on Rees Loop. Set up in the amphitheater. **Three more volunteers with scopes are needed for this event.**

Mesa Verde Elementary School Star Party
Jan 25 (Thu) Set-up: 5:30 PM
NW Tucson Observing: 6:00 PM to 7:30 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: Ina/La Canada

Mesa Verde Elementary School is having a star party for 200 students. The school is located at 1661 W Sage St. Go N on La Canada, past Magee to Sage St. and turn left. Set up on intermediate field or courtyard. **Three volunteers with scopes are needed for this event.**

Carrillo Elementary School Star Party
Jan 26 (Fri) Set-up: 5:00 PM
Downtown Tucson Observing: 6:00 PM to 8:00 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: Cushing/Main

Carrillo Elementary School is having a star party for 80 kindergarten students. The school is located at 440 S Main Ave, south of the Convention Center. Set up on the playground on the south side of the school. **Two more volunteers with scopes are needed for this event.**

Ironwood Picnic Area Public Star Party
Jan 27 (Sat) Set-up: 5:30 PM
Far West Tucson Observing: 6:30 PM to 8:30 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: Kinney/Gates Pass

We are supporting a public star party at the Ironwood Picnic Area in Tucson Mountain Park. About 50 people attend these regularly scheduled star parties. This is located at 7300 West Hal Gras Rd, which is off Kinney Road just south of Old Tucson Studios. Setup will be near the restroom facilities, about 3/4 of the way in from the turn off of Kinney Road. **One more volunteer with scope is needed for this event.**

TAAA Outreach Events (cont.)

Utterback Middle School Star Party
Jan 29 (Mon) Set-up: 5:30 PM
South Tucson Observing: 6:15 PM to 8:00 PM
Leader: Jim Knoll Volunteers Needed: 3
Cross Streets: 36th/Kino

Utterback Middle School is having a star party for 60 students. The school is located at 3233 S Pinal Vista. Go 1 block E on 36th to Campbell Ave. Go 2 blocks south on Campbell to Pinal Vista. Follow Pinal Vista to the school which will be on the E side of the street. **Three volunteers with scopes are needed for this event.**

Vesey Elementary School Star Party
Jan 30 (Tue) Set-up: 5:30 PM
Far West Tucson Observing: 6:00 PM to 7:30 PM
Leader: Jim Knoll Volunteers Needed: 4
Cross Streets: Irvington/Butts

Vesey Elementary School is having a star party for 175 students supporting Family Math and Science Night. The school is located at 5005 S Butts Rd. Take Irvington West from I-19. Go about 5.5 miles and turn south onto Butts Road. The school will be located on the E side of the street. Set up behind the cafeteria between the school and Vesey Park. **Four volunteers with scopes are needed for this event.**

Announcements

- The TAAA has kicked off its **Gateway to the Galaxy** capital campaign. The campaign is seeking to raise funds from corporations and foundations who support our mission of science education outreach. These funds will be used at CAC to complete the large roll-off roof observatory, which will house 4 telescopes, and provide funding for our new Multi-Purpose Building, with meeting space and sleeping rooms.
- The January **Board of Directors Meeting** will be held on January 17th at 6:30 PM in the UMC Cafeteria, Rm 2500F (1500 N Campbell Ave).
- **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.
- **Meeting refreshments are provided by fellow members. We need volunteers for calendar year 2018. A signup sheet will be at the meeting.** Be sure to thank them for the goodies. John Christensen coordinates this important aspect of our meetings—contact him if you want to bring refreshments. The TAAA reimburses up to \$25 (receipts not required). Duties can be shared. Contact John at refreshments-coordinator[at]tucsonastronomy.org.
- **Monthly Bulletin** deadlines are the 15th of the preceding month. Email all submissions to taaa-newsletter[at]tucsonastronomy.org