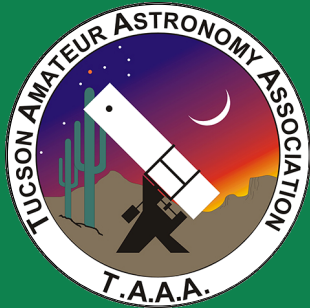


October 2018

Observing our Desert Skies
since 1954



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TUCSON AMATEUR ASTRONOMY ASSOCIATION

Monthly Events Bulletin

October 5th General Meeting

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

Introductory Presentation

6:30pm

Financial Report

presented by

Mike McDowell, TAAA Treasurer

TAAA Treasurer Mike McDowell will present the annual TAAA financial report, and an update on the Chiricahua Astronomy Complex (CAC).

Invited Lecture

7:30pm

Dark Clouds and Prestellar Cores

*- The Beginning Stage of Star
and Planet Formation*

presented by

*Dr. Yancey Shirely, Associate
Professor, University of Arizona*

UA Associate Professor Dr. Yancy Shirley is a Hoosier who received his B.S. in Astronomy and Physics from the University of Arizona, and his Ph.D. at the University of Texas (Austin). He worked at the Very Large Array (radio telescopes) in New Mexico before returning to Arizona and joining the UA faculty in 2008. Dr. Shirley's main studies are in the earliest phases of star formation, astrochemistry, and astrobiology using observations from infrared and radio telescopes.

In the early 1900s, American astronomer Edward Emerson (E.E.) Barnard photographed dark nebula and realized that these regions were not "vacancies" in the sky, but instead clouds of obscuring material. They contain the raw material—solid particles we call dust and a very rich molecular chemistry—from which stars and planets form today. In his talk, Dr. Shirley will describe how stars and planets form and show how we can observe these earliest phases across the Galaxy.

NOTES FROM THE PRESIDENT

The TAAA Board met on September 12, 2018 and some of the topics it addressed include:

Tom Rolfsmeyer gave a presentation about restructuring the Astro-Imaging Special Interest Group (AISIG) and getting it going again. See the AISIG Notice for more information.

The Board approved two requests from Connor Justice on behalf of the Astronomy Fundamentals Special Interest Group (AFSIG). One was a request for a public address system to increase the volume of presentations at the monthly meetings and Astronomy Fundamentals Training. The second was for a new program that with certain paperwork/permissions, AFSIG would be able to record presentations of members at the AFSIG meetings to be shared with members and others. (Note: persons attending the presentation would not be recorded in any identifiable way.)

In addition, Gus Gomez conducted a 5-minute Member Presentation to the Board suggesting the purchase of a specific kind of stickers for telescopes. Gus' interesting suggestion has created a lot of discussion and is under review. We all should pat Gus on the back for being the first TAAA Member to take advantage of the new 5 minute Member Presentation option.

The Board approved use throughout the club of a postcard with basic information about TAAA that was designed by Jim Knoll for distribution to members of the public.

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This Month in Brief

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

| | | |
|--|--|----------|
| Outreach Star Party NW Tucson Jim Knoll | Oct 3 (Wed) Cooper Center Soleng Tom Elementary 5403 W Trail End Rd | 6:30 PM |
| General Meeting Mae Smith | Oct 5 (Fri) Steward Obs. Rm N210 933 N Cherry Ave | 6:30 PM |
| CAC Star Party Mike McDowell | Oct 5/6 (Fri/Sat) CAC Sunsites AZ | Sunset |
| TIMPA Star Party Dennis McMacken | Oct 6 (Sat) TIMPA 3250 N Reservation Rd | Sunset |
| Outreach Star Party South Tucson Jim Knoll | Oct 6 (Sat) Peace Garden 5901 S Fiesta | 6:30 PM |
| Outreach Star Party East Tucson Jim Knoll | Oct 8 (Mon) Fellowship Square 8111 E Broadway | 7:30 PM |
| AFSIG Meeting (Beginners) Dennis McMacken | Oct 11 (Thu) USGS Bldg Room 253 520 N Park Ave | 7:00 PM |
| Outreach Solar Party Elfrida AZ Jim Knoll | Oct 12 (Fri) Elfrida Library 10552 N Hwy 191 | 10:30 AM |
| Public Star Party NE Tucson Jim Knoll | Oct 13 (Sat) Agua Caliente Park 12325 E Roger Rd | 6:30 PM |
| Public Star Party NW Tucson Jim Knoll | Oct 13 (Sat) Catalina State Park 11570 N Oracle Rd | 6:30 PM |

| Key: | TAAA Members Only | For Organization | Public Events |
|--|--|------------------|---------------|
| Outreach Star Party NE Tucson Jim Knoll | Oct 18 (Thu) Tucson Saddle Club Hay Creek Ranch 35406 S Mt Lemmon Rd | 7:00 PM | |
| Ladies Night Out Susan O'Connor | Oct 18 (Thu) TBD | 6:30 PM | |
| Outreach Event Far West Tucson Jim Knoll | Oct 20 (Sat) Boy Scouts of Southern Az 3801 S Kinney Rd | 8:30 AM | |
| Outreach Star Party Central Tucson Jim Knoll | Oct 20 (Sat) Intrnl Observe the Moon UA Mall | 5:00 PM | |
| Outreach Star Party Central Tucson Jim Knoll | Oct 22 (Mon) Catalina High School 3645 E Pima St | 6:30 PM | |
| Outreach Star Party NW Tucson Jim Knoll | Oct 22 (Mon) Cooper Center Ochoa Elementary 5403 W Trail End Rd | 6:30 PM | |
| Outreach Star Party NW Tucson Jim Knoll | Oct 23 (Tue) Cooper Center Wrightstown Elementary 5403 W Trail End Rd | 6:30 PM | |
| Outreach Star Party NW Tucson Jim Knoll | Oct 25 (Thu) Cooper Center Gale Elementary 5403 W Trail End Rd | 6:30 PM | |
| Public Star Party Eastern AZ Jim Knoll | Oct 26 (Fri) Chiricahua Natl Monument 12856 E Rhyolite Creek Rd | 6:30 PM | |

Future Events

| Member Events | |
|--------------------|------------------|
| Nov 2 (Fri) | General Meeting |
| Nov 3 (Sat) | TIMPA Star Party |
| Nov 8 (Thu) | AFSIG Meeting |
| Nov 9 (Fri) | TIMPA Star Party |
| Nov 9/10 (Fri/Sat) | CAC Star Party |
| Nov 14 (Wed) | Board Meeting |
| Nov 15 (Thu) | Ladies Night Out |
| Nov 19 (Mon) | SIMSIG |

| Outreach Events | |
|-----------------|--|
| Nov 3 (Sat) | Cooper Center - Soleng Tom Elementary |
| Nov 5 (Mon) | Dodge Traditional Magnet Middle School |
| Nov 6 (Tue) | Northminster Christian School |
| Nov 6 (Tue) | Catalina High School |
| Nov 8 (Thu) | Esperero Canyon Middle School |
| Nov 9 (Fri) | Cholla High School |
| Nov 10 (Sat) | Agua Caliente Park |
| Nov 13 (Tue) | Whitmore Elementary School |
| Nov 14 (Wed) | Tucson Masonic Lodge |
| Nov 15 (Thu) | Tucson Home School Adventures |
| Nov 15 (Thu) | Butterfield Elementary School |
| Nov 16 (Fri) | AZ STEM Adventure (SARSEF) |
| Nov 17 (Sat) | Ironwood Picnic Area |
| Nov 20 (Tue) | Ford Elementary School |
| Nov 28 (Wed) | Ocotillo Ridge Elementary School |
| Nov 29 (Thu) | Mission Manor Elementary School |
| Nov 30 (Fri) | Vail Academy & High School |
| Nov 30 (Fri) | Tucson Waldorf School |

Special Interest Group (SIG) Activities

Astro-Imaging SIG (AISIG)

Meeting: Oct 16 (Tue) 7:00 PM

Location: Total Wine & More (4370 N Oracle Rd)
Contact: Tom Rolfsmeyer
Group email: astro-photo[at]tucsonastronomy.org
Leader email: mrolf@earthlink.net

At the last TAAA BOD meeting Tom Rolfsmeyer gave a presentation about restructuring the AISIG and getting it going again. The proposal included a specific purpose, objectives, a specific leader and additional shared leadership structure, regular meetings, a plan in which leaders and participants work together, and a list of possible activities. The Board is supportive of the proposal. Tom will hold an organizational meeting for anyone interested in participating in AISIG and/or providing input on October 16th from 6:30 to 8:00pm at the Total Wine and More Store. If you are interested in astro-imaging, in being involved in planning, or in learning about it, please participate in this organizational meeting. To assist with the Astro-Imaging Special Interest Group planning and organization, contact Tom Rolfsmeyer.

Astronomy Fundamentals SIG (AFSIG)

Meeting: Oct 11 (Thu) 6:30 PM

U.S.G.S. Building, Room 253 (520 North Park Ave)
Contact: Connor Justice
Group email: fundamentals[at]tucsonastronomy.org
Leader email: elliot.c.justice[at]gmail.com

Come Come join us for a presentation from the fundamentals of amateur astronomy. Stephen Ferris talk about the northern constellation Persus, followed by Ralph Means who will be giving doing a show and tell on the equipment he uses for observing.

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 Astronomy Fundamentals Special Interest Group, 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, though, of course, it is one of the best way for them to learn about the club and hobby. Please come and share in the fun, whether to learn something new or share some hard won knowledge.

The USGS Building is on the northeast corner of Park and 6th Street. Free parking is available in University parking lots nearby after 5pm. The closest free parking is on the south side of 6th Street. From Sixth Street turn south on Park, turn left into the alley behind The China Pasta House to get into the parking lot. Or, park at the meters, they are also free after 5 PM. Don't park at permit only spaces. There is a fee to park in the Sixth Street parking garage to the east. The meeting room is on the second floor; use the stairway in the central courtyard. An elevator is available on request. Contact Dennis McMacken at 520-609-7860 or email Connor Justice (see above).



Starry Messengers SIG-
Opening Minds to the Universe

Meeting: Nov 19 (Mon) 6:30P

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

The Starry Messengers SIG has a very full plate and could use your help filling requests we have for hands-on activities. These activities take from 5 to 20 minutes to complete. Pick a topic and we'll train you to become an Astronomy Guide for that activity. You will work with another Astronomy Guide until you feel comfortable working alone. Here are upcoming events we want to cover and the requested topics.

10/6 (Sat) Peace Garden 6:30–8:30 pm Space Rocks
11/15 (Thu) Tsn Homeschool Adv. 6–8 pm Solar System
11/16 (Fri) AZ STEM PCC NW 9 am–1 pm undecided
11/28 (Wed) Ocotillo Ridge Elem 5–7 pm Black Holes
11/30 (Fri) Vail Academy/HS 6–8 pm Life in the Universe

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

Oct 5 & 6 (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

Oct 6 & 12 (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 msig@tucsonastronomy.org.

Soleng Tom School Star Party @ Cooper Center

Oct 3 (Wed) **Set-up: 6:00 PM**
Far West Tucson **Observing: 6:30 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 2**
Cross Streets: Speedway/Camino de Oeste

Soleng Tom School is having a star party for 50 students at the Cooper Center. 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.**

Sunnyside Neighborhood Assn. Peace Garden Star Party

Oct 6 (Sat) **Set-up: 6:00 PM**
South Tucson **Observing: 6:30 PM to 8:30 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Drexel/12th Ave

Sunnyside Neighborhood Association is having a star party for about 60 members of all ages at Fiesta Park in the Peace Garden. The park is located at 5901 S Fiesta. The Peace Garden is actually behind the house at 5801 S Liberty. Telescopes are to be set up near the Obelisk on the west and east side of the labyrinth. **Two more volunteers with scopes and a NSN Toolkit volunteer are needed for this event.**

Fellowship Square Retirement

Oct 8 (Mon) **Set-up: 6:30 PM**
East Tucson **Observing: 7:00 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 2**
Cross Streets: Broadway/Pantano

The Fellowship Square Retirement is having a star party for about 25 members. It is located at 8111 E Broadway Blvd just east of Pantano. **Two volunteers with scopes are needed for this event.**

Elfrida Library Solar Party

Oct 12 (Fri) **Set-up: 10:00 AM**
Elfrida AZ **Observing: 10:30 AM to 12:00 PM**
Leader: Jim Knoll **Volunteers Needed: 1**
Cross Streets: Hwy 191/Gleeson Rd

TAAA is supporting a solar party at the Elfrida Public Library. The library is located at 10552 N Hwy 191. Take I-10 or Dragon Road to Hwy 191. South to Gleeson Road (south of 181). From Gleeson & Hwy 191, go south 1/2 mile. Turn right just past the Health Clinic and then turn a hard left and go around behind the community center. The Library is located there. Setup outside the Library. **No more volunteers are needed.**

Agua Caliente Park Public Star Party

Oct 13 (Sat) **Set-up: 6:00 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. 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.**

TAAA Outreach Events (Cont.)

Thank You Volunteers!

Potential Contacts This Month: 1600
 Volunteers Needed This Month: 44

Catalina State Park Public Star Party

Oct 13 (Sat) **Set-up: 6:00 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. **Ten volunteers with scopes are needed for this event.**

Tucson Saddle Club @ Hay Creek Ranch

Oct 18 (Thu) **Set-up: 6:30 PM**
NW Tucson (Oracle) **Observing: 7:00 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Hwy 77/American Flag Ave

The Tucson Saddle Club is having a star party for about 60 members at Hay Creek Ranch. It is located at 35406 South Mount Lemmon Road. Take Highway 77 north to American Flag Ave. East on American Flag. Right on Mt Lemmon Road. Go 8 miles (last portion dirt) to white board fence and Hay Creek Ranch sign. Go through gate to observing location. **Three volunteers with scopes are needed for this event.**

Boy Scouts of America @ Double V Ranch

Oct 20 (Sat) **Solar Set-up: 8:30 AM**
NW Tucson (Oracle) **Observing: 9:00 AM to 12:00 PM**
Evening Set-up: 5:00 PM
Observing: 5:30 PM to 8:30 PM
Leader: Jim Knoll **Volunteers Needed: 1(Day)/2(Night)**
Cross Streets: Ajo/Kinney

The Boy Scouts are a solar/star party for about 60 members at Double V Ranch. It is located near Ajo Highway and Kinney Rd. Take Kinney North .7 miles Ranch entrance on right. Viewing Location: Ramada Grande (Solar). South end of the pool area (evening). **Three volunteers with scopes (1 Solar/2 Night) are needed for this event.**

International Observe the Moon Night @ UA Mall

Oct 20 (Sat) **Set-up: 5:30 PM**
Central Tucson **Observing: 6:00 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Speedway/Cherry

To celebrate International Observe the Moon Night the TAAA will be having a star party at the University of Arizona Mall. From Speedway & Cherry go south on Cherry to the UA Mall area. Set up will be south of the Lunar & Planetary Lab (LPL) near Flandrau. Unload on the Mall and repark vehicle. Viewing Location: UA Mall south of LPL. **Three volunteers will be needed for this event, two volunteers with scopes and one NSN Toolkit volunteer.**

TAAA Outreach Events (Cont.)

Catalina High School Star Party

Oct 22 (Mon) **Set-up: 6:00 PM**
Cental Tucson **Observing: 6:30 PM to 8:30 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Alvernon/Pima

The Catalina High School is having a star party for about 20 students. The school is located at 3645 E Pima St. From Alvernon go west on Pima to the school. The viewing Location is on the basketball courts east of the football field. **Three volunteers with scopes are needed for this event.**

Ochoa Elementary Star Party @ Cooper Center

Oct 22 (Mon) **Set-up: 6:00 PM**
Far West Tucson **Observing: 6:30 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 2**
Cross Streets: Speedway/Camino de Oeste

Ochoa Elementary School is having a star party for 40 students at the Cooper Center. 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.**

Wrightstown Elementary Star Party @ Cooper Center

Oct 23 (Tue) **Set-up: 6:00 PM**
Far West Tucson **Observing: 6:30 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 2**
Cross Streets: Speedway/Camino de Oeste

Wrightstown Elementary School is having a star party for 60 students at the Cooper Center. 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.**

Gale Elementary Star Party @ Cooper Center

Oct 25 (Thu) **Set-up: 6:00 PM**
Far West Tucson **Observing: 6:30 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 2**
Cross Streets: Speedway/Camino de Oeste

Gale Elementary School is having a star party for 50 students at the Cooper Center. 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.**

Chiricahua National Monument Star Party

Oct 26 (Fri) **Set-up: 6:00 PM**
Far East Arizona **Observing: 6:30 PM to 8:30 PM**
Leader: Jim Knoll **Volunteers Needed: 4**
Cross Streets: AZ ST181/Park Entrance

The TAAA will be having a public star party at the Chiricahua National Monument. To get to the monument take I-10 East to Exit 336 (Willcox). East on AZ 186 (Maley St in Willcox). Travel 40 miles to AZ 181. Turn on AZ 181 for 4 miles to Park Entrance. The total distance is 100 miles from the I-10 Houghton Exit. Setup TBD; either Far Away Ranch Parking Area or Echo Canyon. **One more volunteer with a scope is needed for this event.**

Announcements

- The October **Board of Directors Meeting** will be held on October 10th at 6:30 PM at Banner University Medical Center in meeting Room C (bordering the Banner UMC Cafeteria) (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.
- **Holiday Party!** The TAAA Holiday Party will be held at the Foley home December 1st.
- **Astronomical League Workshop.** Doug Smith is holding a workshop for people pursuing Astronomical League Programs on August 25th. You may contact Doug at dsmith217@cox.net.
- **CAC Star-B-Que! Will be Saturday October 6th.** Save the date.
- **Volunteer needed to serve as TAAA Refreshment Coordinator.** This person organizes volunteers to bring refreshments for each Member Meeting. Thanks to John Christensen for having done this job for several years and for doing an excellent job, but John cannot continue at present. To help out, please contact Mae Smith at smsmith@email.arizona.edu.
- **Volunteer needed to edit and post video-recordings of Member Meetings.** Contact Mae Smith at smsmith@email.arizona.edu.
- **Web comments, suggestions or problems,** contact our team at webteam@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.