

April 2019

Observing our Desert Skies  
since 1954



www.tucsonastronomy.org

TUCSON AMATEUR ASTRONOMY ASSOCIATION

# Monthly Events Bulletin

## April 5th General Meeting

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

**Introductory Presentation**  
**6:30pm**  
*Seasonal Night Sky Objects*  
presented by  
Mary Turner

Mary Turner, TAAA's appointed Chief Observer, takes us on a tour of the spring night sky. As usual in her popular talks, Mary's uses astronomical data, images, and mythology to bring seasonal changes in the sky to life.

**Invited Lecture**  
**7:30pm**  
*An Introduction to Slit-less  
Grating Spectroscopy*  
presented by  
Professor David Iadevaia

Rhode Island native and retired Astronomy and Physics Professor David Iadevaia, has taught middle school/high school physical science/physics up through university astronomy. In 1983, he became Instrument Specialist for the Echelle spectrograph at the MMT on Mt. Hopkins. The next year, he began a 30-year teaching career at Pima Community College. His accomplishments there include designing the Professor Pima Portable Planetarium Program, and establishing Pima's East Campus Observatory, the first teaching observatory in Arizona. In 1986, he received the Tucson Trade Bureau Outstanding Faculty Award. David has been a lifelong amateur astronomer and as a retiree he's returning to his astronomy roots.

David will present an introduction to low resolution, slit-less grating spectroscopy. He'll begin with a brief overview of the nature of light with such concepts as Wien's Law and the Doppler Effect as they apply to spectroscopy. Spectra taken with a slit-less grating spectroscope will be shown, along with an explanation of how to interpret the data in spectra. David will talk about the equipment needed to capture spectra, and the software available to reduce a spectrum's data for research. A brief overview of the growing international community of spectroscopists will be included.

### Inside this Bulletin

TAAA BoD Meeting  
Apr 3

CAC Star Party  
Apr 5 & 6

TIMPA Star Party  
Apr 6 & 26

AFSIG Meeting  
Apr 11

Astronomy Festival  
Apr 13

AISIG Meeting  
Apr 16

Ladies Night Out  
Apr 18

Announcements  
Page 5

### 65th Anniversary Star-B-Que

The TIMPA 65th Anniversary Star B Que will be held April 6th beginning at 4:00pm. TAAA will provide grill, anniversary cake, hot drinks, water, a Ramada with tables, table supplies. Afterwards enjoy viewing with the **Gila Monster Observatory** 14" telescope as well as other scopes.

TAAA members bring a dish to share and something to barbeque for yourself (if you wish); and a telescope (if you wish); and good company.

**Come for Star-B-Que, viewing or both!!**

TIMPA has tables but NO CHAIRS. Bring a chair for yourself and an extra chair if you have one. Also, bring a red light to use in the telescope area at night so that you can avoid the gopher holes.

## Upcoming Activities

### This Month's Events

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

Key:	TAAA Members Only	For Organization	Public Events
Outreach Solar Party North Tucson Jim Knoll	Apr 4 (Thu) Phi Beta Sigma @ Westin La Paloma 3800 E Sunrise	8:00 PM	
General Meeting Mae Smith	Apr 5 (Fri) Steward Observatory 933 N Cherry	6:30 PM	
CAC Star Party Mike McDowell	Apr 5/6 (Fri/Sat) CAC Sunsites AZ	Sunset	
TIMPA Star Party Dennis McMacken	Apr 6 (Sat) TIMPA 3250 N Reservation Rd	Sunset	
Outreach SOLAR Party South Tucson Jim Knoll	Apr 6 (Sat) Autism Fair @ Kino Sports Complex 42500 E Ajo Way	7:30 AM	
Outreach Star Party West Tucson Jim Knoll	Apr 6 (Sat) Cooper Center (Coll of Ed) 5403 W Trails End Rd	7:15 PM	
Outreach Solar Party Central Tucson Jim Knoll	Apr 7 (Sun) Tucson Hebrew Academy 3888 E River Rd	10:00 AM	
Outreach Star Party SW Tucson Jim Knoll	Apr 9 (Tue) Vesey Elementary 5005 S Butts Rd	7:00 PM	
AFSIG Meeting (Beginners) Connor Justice	Apr 11 (Thu) UA Education North Building, Room 110 1501 E Speedway Blvd	6:30 PM	
Outreach Solar Party Vail Jim Knoll	Apr 12 (Fri) Vail Academy/High School 7762 E Science Park Dr	4:00 PM	
Outreach Star Party Central Tucson Jim Knoll	Apr 12 (Fri) Catalina High School 3645 E Pima St	7:00 PM	
Outreach Solar/Star Astronomy Festival Central Tucson Jim Knoll	Apr 13 (Sat) Brandi Fenton Park 3482 E River Rd	2:00 PM	
Outreach Star Party Way South Jim Knoll	Apr 17 (Wed) GSSA @ Tumacacori National Park 1891 E Frontage Rd	6:45 PM	
Ladies Night Out Susan O'Connor	Apr 18 (Thu) Zing Zing 4590 E Broadway Blvd	6:30 PM	
Outreach Star Party SW Tucson Jim Knoll	Apr 23 (Tue) CE Rose Elementary 710 W Michigan Dr	7:00 PM	
Outreach Star Party West Tucson Jim Knoll	Apr 24 (Wed) Cooper Center (Kellond) 5403 W Trails End Rd	7:00 PM	
Outreach Star Party West Tucson Jim Knoll	Apr 27 (Sat) Cooper Center (Adventure) 5403 W Trails End Rd	7:00 PM	

### This Month's Events Cont.

Outreach Star Party Marana Jim Knoll	Apr 27 (Sat) Ora Mae Harn Park 13250 N Lon Adams Rd	7:00 PM
Public Star Party Far West Tucson Jim Knoll	Apr 27 (Sat) Ironwood Picnic Area 7300 W Hal Gras Rd	7:30 PM
Outreach Star Party West Tucson Jim Knoll	Apr 30 (Tue) Cooper Center(Soleng Tom) 5403 W Trails End Rd	7:15 PM
Outreach Star Party South Tucson Jim Knoll	Apr 30 (Tue) Utterback Middle School 3233 S Pinal Vista	7:15 PM

### Future Events

Member Events	
May 3 (Fri)	General Meeting
May 8 (Wed)	Board Meeting
May 9 (Thu)	AFSIG Meeting
May 16 (Thu)	Ladies Night Out
Outreach Events	
May 1 (Wed)	Camp Cooper (Borton Elem)
May 2 (Thu)	Camp Cooper (Borton Elem #2)
May 3 (Fri)	Catalina HS @ CAC
May 3 (Fri)	Camp Cooper (Mansfield MS)
May 4 (Sat)	Agua Caliente Park
May 4 (Sat)	Sanctuary Cove
May 6 (Mon)	Camp Cooper (CE Rose)
May 8 (Wed)	Camp Cooper (Exceptional Ed)
May 8 (Wed)	Borman (DM AFB)
May 9 (Thu)	Camp Cooper (McCorkle Elementary)
May 11 (Sat)	CAC - Evening Under the Stars
May 18 (Sat)	Flandreau Science Center
May 25 (Sat)	Sonoran Desert Museum

## TAAA Ladies Night Out

Thursday, April 18

6:30 pm

Zing Zing

4590 E Broadway Blvd

(S side of Broadway one block W of Swan)

Preview menu at <https://zingzings.com/menu.aspx>

RSVP Susan

## Special Interest Group (SIG) Activities

### Astro-Imaging SIG (AISIG)

**Meeting: Apr 16 (Tue)**

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

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 Tom Rolfsmeyer.

### Astronomy Fundamentals SIG (AFSIG)

**Meeting: Apr 11 (Thu) 7:00 PM**

UA Education North Building, Room 110 (1501 E 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. Kay Lehman will start the night with a talk about the southern constellation **Centaurus**. For our main topic, Doug Smith will be discussing **Astronomy and The Onion**.

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 that 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, 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.

**Room:** To locate the entrance to Room 110, go to the North side of the building and there is a driveway between the Education North Building and the Helen S. Schaefer Building. The outside entrance to Room 110 is the MIDDLE of three entrances. The door should be propped open for the meeting. However, if it is closed just bang on the door.

**Parking:** Zone 1 parking around the building is free after 5:00pm. There is a lot behind the building, street parking, and a large parking lot across the street. There is also a parking garage one block north of Vine and Helen, however, fees may be required.

**Accessibility:** The entrance, classroom and restrooms are all on ground level. However, the entrance from the driveway is raised about 4". There are back and front entrances to avoid the raised inconvenience. You can arrange to be met by contacting Mae Smith at 520 850-7137.



Starry Messengers SIG  
Opening Minds to the Universe

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

Our main activities now surround our **6th Annual Astronomy Festival at Brandi Fenton Memorial Park** to take place on April 13th. We could use volunteers prior to the event to help with logistics, so contact Terri Lappin if you want to help. Of course, we'll need lots of help on April 13th, too. So plan to bring your scope (starting at 3pm for solar) or help with our hands-on exhibits. We will be highlighting the Lunar Missions this year.

## 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

**Apr 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

**Apr 6 & 26 (Sat & 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 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](mailto: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](mailto:msig@tucsonastronomy.org).

**Phi Beta Sigma Fraternity Star Party @ Westin La Paloma**  
**Apr 4 (Thu)** Set-up: 7:15 PM  
**South Tucson** Observing: 8:00 PM to 10:00 PM  
**Leader: Jim Knoll** Volunteers Needed: 2  
**Cross Streets: Swan/Sunrise**

The TAAA is supporting a star party for 40 Phi Beta Sigma fraternity and guests at the Westin La Paloma located at 3800 E Sunrise Dr. From Swan go west on Sunrise past Hacienda Del Sol and turn left on Via Palomita. Turn right at the stop sign into the resort. The viewing location is **TBD. Two volunteers with scopes are needed for this event.**

**Autism Fair Solar Party @ Kino Sports Complex**  
**Apr 6 (Sat)** Set-up: 6:30 AM  
**South Tucson** Observing: 7:30 AM to 12:30 PM  
**Leader: Jim Knoll** Volunteers Needed: 3  
**Cross Streets: Ajo/Country Club Blvd**

The TAAA is supporting a solar party and NSN Toolkit demonstration for the Autism Fair at the Kino Sports Complex. The Kino Sports Complex is located on Ajo Way between I-10 and Country Club Blvd. The viewing location is on the stadium concourse. **One more volunteer with a solar scope and one NSN Toolkit volunteer are needed for this event.**

**College of Education Star Party @ Cooper Center**  
**Apr 6 (Sat)** Set-up: 6:45 PM  
**Far West Tucson** Observing: 7:15 PM to 10:00 PM  
**Leader: Jim Knoll** Volunteers Needed: 2  
**Cross Streets: Speedway/Camino de Oeste**

We are supporting a star party for UA College of Education for 40 people. 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.**

**Tucson Hebrew Academy Solar Party (NSN Toolkit)**  
**Apr 7 (Sun)** Set-up: 9:30 AM  
**North Central Tucson** Observing: 10:00 AM to 2:00 PM  
**Leader: Jim Knoll** Volunteers Needed: 5  
**Cross Streets: River/Alvernon**

Tucson Hebrew Academy is having a solar party and NSN Toolkit demonstration (inside) for 800 students grades 1-6. The school is located at 3888 E River Rd. Go east on River from Alvernon, the school is just east of the Jewish Community Center. Set up on the grass field south of the campus. **Two more volunteers with solar scopes are needed for this event.**

**Vesey Elementary School Star Party**  
**April 9 (Tue)** Set-up: 6:30 PM  
**Far West Tucson** Observing: 7:00 PM to 8:30 PM  
**Leader: Jim Knoll** Volunteers Needed: 4  
**Cross Streets: Irvington/Butts**

Vesey Elementary School is having a star party for 150 students. 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.**

## TAAA Outreach Events (Cont.)

**Thank You Volunteers!**

Potential Contacts This Month: 2690  
 Volunteers Needed This Month: 61

**Vail Academy & High School SOLAR Party**  
**Apr 12 (Fri)** Set-up: 3:30 PM  
**SE Tucson (Vail)** Observing: 4:00 PM to 6:00 PM  
**Leader: Jim Knoll** Volunteers Needed: 3  
**Cross Streets: Kolb/Science Park Dr**

Vail Academy and High School is having a SOLAR party and NSN Toolkit demonstration for 200 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 volunteers with solar scopes and one NSN Toolkit volunteer are needed for this event.**

**Catalina High School Star Party**  
**Apr 12 (Fri)** Set-up: 6:30 PM  
**Central Tucson** Observing: 7:00 PM to 9:00 PM  
**Leader: Jim Knoll** Volunteers Needed: 3  
**Cross Streets: Alvernon/Pima**

The Catalina High School is having a star party for about 25 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.**

**Astronomy Festival @ Brandi Fenton Park**  
**Apr 13 (Sat)**  
**Central Tucson**  
**Leader: Jim Knoll** Volunteers Needed: AMAP  
**Cross Streets: River/Alvernon**

Set-up: NSN 2:00 PM/Solar 2:00 PM  
 Start: Solar/NSN 3:00 PM  
 Set-up: Night 6:30 PM  
 Observing: 7:00 PM to 9:00 PM

The Astronomy Festival is the TAAA's largest public outreach event. In addition to nighttime observing we will need Night Sky Network (NSN) Toolkit and solar telescope volunteers for this event. Brandi Fenton Park is located at 3482 E River Rd. Enter the park at the intersection of River Rd and Alvernon. Interactive exhibits will be setup at Ramada 1 and solar and nighttime will be setup in the open grass field by Ramada 1. **As Many As Possible (AMAP) NSN Toolkit/Solar Telescope/Star Party Telescope Volunteers are needed for this event. Please indicate what time slot you can support.**



## TAAA Outreach Events (Cont.)

### GSSA Star Party @ Tumacacori National Park

Apr 17 (Wed) Set-up: 6:30 PM  
 Way South Observing: 7:00 PM to 8:30 PM  
 Leader: Jim Knoll Volunteers Needed: 2  
 Cross Streets: I-19/Exit 29 (45 miles south of Tucson)

The TAAA is supporting a star party for 40 scouts from the Girl Scouts of Southern Arizona at Tumacacori National Park. To get to the park take I-19 south to exit 29 and follow the signs. Setup in the courtyard (some manual movement is required). **One more volunteer with a scope is needed for this event.**

### C. E. Rose Elementary School Star Party

April 23 (Tue) Set-up: 6:00 PM  
 Far West Tucson Observing: 7:00 PM to 8:00 PM  
 Leader: Jim Knoll Volunteers Needed: 4  
 Cross Streets: Ajo/12th

C. E. Rose Elementary School is having a star party and NSN Toolkit demonstration. The school is located at 710 W Michigan Dr. Take Ajo east from I-19 to 12th. Go south on 12th 0.5 miles to Michigan. Setup is on the basketball court or soccer field. **Three volunteers with scopes and one NSN Toolkit volunteer are needed for this event.**

### Kellond Elementary School Star Party @ Cooper Center

Apr 24 (Wed) Set-up: 6:30 PM  
 Far West Tucson Observing: 7:00 PM to 8:30 PM  
 Leader: Jim Knoll Volunteers Needed: 2  
 Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Kellond Elementary School for 25 students (Grade 3). 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.**

### Adventure Middle School Star Party @ Cooper Center

Apr 27 (Sat) Set-up: 7:00 PM  
 Far West Tucson Observing: 7:30 PM to 9:00 PM  
 Leader: Jim Knoll Volunteers Needed: 2  
 Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Adventure Middle School for 40 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.**

### Ora Mae Harn Park (Camping Under the Stars) Star Party

Apr 27 (Sat) Set-up: 6:30 PM  
 Marana Observing: 7:00 PM to 9:00 PM  
 Leader: Jim Knoll Volunteers Needed: 2  
 Cross Streets: I-10/Sandario Rd

We are supporting a public star party at Ora Mae Harn Park. About 200 people are expected. The park is located at 13250 N Lon Adams Rd. From Tucson, take I-10 to exit 236. Take Sandario Rd south (west side of I-10) and turn left (east) on Grier Rd. Turn right (south) on Lon Adams Rd and continue straight. The Park entrance will be on the left just past Chief Gaudette Dr (if you reach Barnett Rd, you have gone too far). **One more volunteer with a scope is needed for this event.**

## TAAA Outreach Events (Cont.)

### Ironwood Picnic Area Public Star Party

Apr 27 (Sat) Set-up: 6:00 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 the Tucson Mountain Park. About 50 people attend these regularly scheduled star parties at the Ironwood Picnic Area. 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. **Three volunteers with scopes are needed for this event.**

### Soleng Tom Elementary School Star Party @ Cooper Center

Apr 30 (Tue) Set-up: 6:45 PM  
 Far West Tucson Observing: 7:15 PM to 8:30 PM  
 Leader: Jim Knoll Volunteers Needed: 2  
 Cross Streets: Speedway/Camino de Oeste

We are supporting a star party for Soleng Tom Elementary School 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.**

### Utterback Middle School Star Party

Apr 30 (Tue) Set-up: 6:45 PM  
 South Tucson Observing: 7:15 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. Setup in back of the school. **Three volunteers with scopes are needed for this event.**

## Announcements

- The April **Board of Directors Meeting** will be held one week earlier than usual on Wednesday, April 3rd, at 6:30 PM at UA College of Education, 1430 East Second street(across the parking lot from Steward Observatory). . Members are welcome to attend.
- **Monthly Bulletin** deadlines are the 15th of the preceding month. Email all submissions to [taaa-newsletter\[at\]tucsonastronomy.org](mailto:taaa-newsletter[at]tucsonastronomy.org)
- **Equipment Loaner program.** Contact Ralph Means at [elc@tucsonastronomy.org](mailto:elc@tucsonastronomy.org), or 520 460-8770 or [bookbuyer1769@gmail.com](mailto: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.