

February 2020

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TUCSON AMATEUR ASTRONOMY ASSOCIATION

# Monthly Events Bulletin

## February 7th General Meeting

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

### **Introductory Presentation**

**6:30pm**

*Member Planet  
Database Update  
presented by*

*David Rosetter, TAAA Member*

David Rosetter, in charge of the TAAA Member Planet system, (which manages the TAAA member database), will talk about expanded web benefits for TAAA members and provide information on the web options available. Bring any questions you have on how to best access TAAA information.

### **Invited Lecture**

**7:30pm**

*A Tale of Two Galaxies*

*presented by  
Dr. Knut Olsen,  
Staff Astronomer,  
NSF's OIR Lab*

Dr. Knut Olsen is a staff astronomer at the National Science Foundation's Optical-Infrared Astronomy Research Laboratory, based in Tucson. Born in Norway, he moved to the U.S. at a young age and quickly developed a fascination for astronomy. He worked on the Magellanic Clouds as part of his Ph.D. thesis, and continued his exploration of them while living and working in La Serena, Chile, where the Clouds are naked eye objects. He moved to Tucson in 2007.

Dr. Olsen will present a personal story of how a chance observing run kicked off more than a decade of exploration of and discovery in the Magellanic Clouds, two of our most prominent neighbor galaxies. The Magellanic Clouds have been key to establishing the extragalactic distance scale, played a seminal role in the discovery of Dark Energy, and are causing us to adjust our view of the Milky Way.

### **Inside this Bulletin**

**SIMSIG Meeting**  
Feb 9

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Feb 15

**Ladies Night Out**  
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Feb 21

**CAC Star Party**  
Feb 21 & 22

### **Spring 2020 Astronomy Class**

The Astronomy Fundamentals Special Interest Group (AFSIG) will offer its popular Introduction to the Fundamentals of Observational Astronomy class again this Spring. The dates are: March 21, March 28, and April 4, 2020.

This class is aimed at giving the beginning amateur astronomer a good start in the hobby including:

- Day 1 - some basics in observational astronomy and celestial objects
- Day 2 – introduction to the equipment used in amateur astronomy
- Day 3 - observing tools and techniques

The class is given over the three Saturdays and usually runs from 9:00 AM to 4:00 PM. After the last day, students and instructors will meet at TIMPA for a potluck supper and star party. The class is open to all TAAA members. Registration for the class is open now. There is no charge to take the class. To enroll, send an e-mail to

[fundamentals\[at\]tucsonastronomy.org](mailto:fundamentals[at]tucsonastronomy.org)

or contact J.D. Metzger or one of the AFSIG Committee members. There will be a sign-up sheet available at the January, February, and March TAAA General Meetings.

## **PRESIDENT'S MESSAGE**

January 2020 has started with momentum. Those of you who have visited CAC recently have realized that Construction on the classroom and sleeping buildings has resumed. While we were delayed in 2019 with permit requirements, with effects of batches of water that needed to be absorbed and limited activities like accessing needed gravel, and with a shortage of workers, those conditions seem to have improved in 2020. In addition, starting the new year brings a new surge of activity with (1) the TAAA Nomination and Volunteer Resource Committee (NVRC) beginning to seek candidates for the 2020 officer and the 2 NVRC 2020 Committee Member slots; (2) Starry Messenger Special Interest Group (SMSIG) gearing up for the new year including science education training for the upcoming Tucson Festival of Books, Science and Engineer Fair, and other STEM activities with children and youth; (3) preparation currently going on for the three-day Astronomy Fundamentals class in March and April; (4) a busy spring already scheduled for Nonprofit/School Star Parties and Tucson Stargazing Adventures (TSA); and (5) the email process beginning for volunteer enrollment for the 2020 Grand Canyon Star Party (GCSP). Also, at the February TAAA meeting, David Rossetter will be rolling out some new options for members/club groups that will be becoming available through our database program, Member Planet.

### **Discussed at the January Board meeting were:**

- A discussion of the concept of Planned Giving. An update on all financial matters.
- A review of the current status of CAC operations with the announcement of beginning resumption of construction on the two buildings.
- An AED (automatic external defibrillator) update with the training of 12 persons completed and the AED being delivered to CAC. It is temporarily stored in the RMO until it can be attached to the bathroom wall.
- Discussion was held of some TIMPA telescope procedures dealing with not opening the 14" telescope when the TIMPA Director has closed the site and ensuring updated training for operators. A TIMPA Committee will meet and create the necessary policies for protecting the site.
- A lengthy discussion was held of Astronomical League participation and of steps and procedures that might be pursued to encourage increased AL involvement by members. Doug Smith provided some figures about the number of AL awards achieved by TAAA members in comparison to those of other clubs. (Apparently, for instance, Minnesota with about 400 members usually receives 40 to 50 awards a year while TAAA has been ranging from 4 to 13 a year.) Among the suggestions was using TIMPA more frequently to assist members in pursuing observing programs and providing someone to work with members to offer hands-on guidance through the programs.

## **SMSIG at the TFOB**

The **Tucson Festival of Books (TFOB)** and the UA ScienceCity is a perfect setting to spread our joy of astronomy. Each year we have a different theme. Our first TFOB theme in 2010 was black holes. Each year has been an amazing success story and 2020 will be no different, but we need your help to make it so.

Inspired by the upcoming launch of the Mars 2020 rover which will continue the search for past life on Mars, our theme is the **Search for Life**. One activity is a set of radio-controlled rovers that kids will operate, collecting samples (ball bearings). Another activity will involve adding water to three different dirt samples and observing the reaction for signs of life (in this case, yeast). For the younger kids, we have craft materials to create their own extraterrestrial. For the older crowd, we have information about the Mars 2020 rover, examples of Earthly extreme life forms, an exercise based on the Drake Equation, and information about Goldilocks planets – those at just the right distance from their star that they may support life. We will also have two telescopes for observing the sun (these are being arranged through Jim Knoll).

How can you help us succeed? Please, sign up as a volunteer for our booth. Our young guests will be doing the activities, but our volunteers will guide their discovery. Other volunteers will tell about the Mars rovers and the detection of exoplanets. Of course, we also talk about the TAAA. We ask for volunteers to cover a three-hour shift if they can. We need volunteers on Saturday from 7am to 6pm and Sunday 9am to 6:30pm.

A training session is set for Saturday, March 7th, 1pm – 3pm, at the Woods Public Library. We highly encourage volunteers to attend as it will give you a chance to learn one or more activity. There are specific instructions for working with the yeast samples and the rovers take a little practice to operate.

A signup sheet will be at the February meeting, or you can sign up by visiting this link to a Google Form: <https://forms.gle/mSgpcsu3WL7hoH9B6>, or by emailing Terri Lappin at [terrilappin@tucsonastronomy.org](mailto:terrilappin@tucsonastronomy.org).

## **TAAA Trivia!**

### **Trivia Question 1:**

Last year, 2019, TAAA celebrated its 65th Anniversary at Steward Observatory and TIMPA with Tim Hunter as the lead speaker. For the previous 50th Anniversary celebration, where was it held, who was President then, and who was the lead speaker for the celebration?

### **Trivia Question 2a:**

What TAAA Who received an AL Award this month? **2b:** Which TAAA members completed the AED training in December that assisted TAAA in obtaining an AED to be housed at CAC? **2c:** Who is Mr An and what is TAAA's newfound relationship with Mr. An?

(Trivia answers are at the bottom of page 3)

## Upcoming Activities This Month's Events

Key:	TAAA Members Only	For Organization	Public Events
Outreach Star Party NW Tucson Jim Knoll	Feb 6 (Thu) Harelson Elementary School 826 W Chapala Dr 6:00 PM	Outreach Star Party Far West Tucson Jim Knoll	Feb 16 (Sun) Saguaro National Park West 2700 N Kinney Rd. 7:00 PM
Outreach Star Party Vail Jim Knoll	Feb 6 (Thu) Cottonwood Elementary 9950 Rees Loop 5:00 PM	Outreach Star Party NW Tucson Jim Knoll	Feb 18 (Tue) Robins K-8 3939 N Magnetite Lane 6:30 PM
General Meeting Mae Smith	Feb 7 (Fri) Steward Observatory 933 N Cherry 6:30 PM	Ladies Night Out Susan O'Connor	Feb 20 (Thu) Guadalajara Fiesta Grill 750 N Kolb Rd 6:30 PM
SIMSIG Meeting Terri Lappin	Feb 9 (Sun) Martha Cooper Library 1377 N Catalina St 1:00 PM	Public Star Party East Tucson Jim Knoll	Feb 20 (Thu) Saguaro National Park East 3693 S Old Spanish Trail 7:00 PM
AISIG Meeting Tom Rolfsmeyer	Feb 10 (Mon) Total Wine and More 4370 N Oracle Rd 6:30 PM	Outreach Star Party Sonoita Jim Knoll	Feb 21 (Fri) Harvest Homeschoolers 30 Thunderhead Trail 6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Feb 12 (Wed) Lulu Walker Elementary 1750 W Roller Coaster Rd 6:30 PM	TIMPA Star Party Ralph Means	Feb 21 (Fri) TIMPA 3250 N Reservation Rd Sunset
Outreach Star Party NW Tucson Jim Knoll	Feb 12 (Wed) Pusch Ridge Christian Academy High School 9500 N Oracle Rd 6:30 PM	CAC Star Party Mike McDowell	Feb 21/22 (Fri/Sat) CAC 9313 E Perseus Way Sunset
AFSIG Meeting (Beginners) Connor Justice	Feb 13 (Thu) Ward 6 Office - East Rm 3202 E 1st St 6:30 PM	Public Star Party Far West Tucson Jim Knoll	Feb 22 (Sat) Ironwood Picnic Area 7300 Hal Gras Rd 6:30 PM
TIMPA Star Party Ralph Means	Feb 15 (Sat) TIMPA 3250 N Reservation Rd Sunset	Outreach Solar Party East Tucson Jim Knoll	Feb 26 (Thu) Borman Elementary School 6630 Lightning Dr 4:00 PM
Public Star Party NE Tucson Jim Knoll	Feb 15 (Sat) Tucson Star Party @ Pima Community College East 8181 E Irvington Rd 6:00 PM	Outreach Solar Party Sahuarita Jim Knoll	Feb 27 (Thu) Sahuarita Middle School 350 W Sahuarita Rd 8:30 AM
Outreach Star Party NW Tucson Jim Knoll	Feb 18 (Tue) Robins K-8 3939 N Magnetite Lane 6:30 PM	Outreach Star Party Central Tucson Jim Knoll	Feb 28 (Fri) Catalina High School 3645 E Pima St 5:30 PM

### Trivia Answers!

**Trivia Question 1:** The TAAA 50th Anniversary Celebration was held at a restaurant in Tucson called Hidden Valley. Thom Peck (whom we miss), an optics person who now lives in California, was President of TAAA at the time of the 50th Anniversary celebration. The lead guest speaker for the event was Brother Guy Consolmagno, who was the current Director of the Vatican Observatory, and individual Past-Presidents shared information about the growth and development of TAAA.

**Trivia Question 2a:** Gus Gomez received the Astronomical League Urban Observing Award in January. **Answer to Trivia Q2b:** TAAA members completing the AED training that assisted TAAA in obtaining an AED to be housed at CAC included: Ed Foley, Gus Gomez, Chuck Hendricks, Joe Jacoby, John Mead, John Kalas, Liz Kalas, Dennis Means, Ralph Means, Mae Smith, Bernie Stinger, Conrad Stolarski; **Answer to Trivia Q2c:** TAAA now has a connection to Mr. An, the Tucson Restaurateur. Mr. An long ago lost his father, grandfather and 6 brothers to heart attacks. At the age of 57, Mr. An had a cardiac arrest and lived via an AED resuscitation which saved his life. Mr. An has received the 2020 Philanthropic Award from the Stephen Goetter Foundation as a result of the many, many gifts of AEDs he has provided to the Goetter Foundation. The Goetter Provided the AED device to TAAA in 2019 and it likely is one of the devices donated by Mr. An. Nice to think that when we see him, we can thank him for his special service to the community and to TAAA.

## Special Interest Group (SIG) Activities

### Astronomy Fundamentals SIG (AFSIG)

**Meeting: February 13 (Thu) 6:30 PM**

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

Come join us for a presentation from the fundamentals of amateur astronomy. Gus Gomes will be presenting Auriga for the constellation of the month, and our main topic will be an open discussion on equipment modifications that members have done to enhance their viewing sessions.

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](mailto: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.

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 required to be 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.

### Astro-Imaging SIG (AISIG)

**Meeting: February 10 (Mon) 6:30 PM**

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

This month's topic will be imaging with a DSLR camera. If you are interested in Astro-Imaging, in being involved in planning, or in learning about it, please participate in these meetings.

TAAA Astro-Imaging SIG (AISIG) Meetings usually occur on the 3rd or 4th Tuesday of the month, but the date and time may vary (please check the Events Calendar). We meet at Total Wine and More, 4370 N. Oracle Rd. If you are just getting into imaging the night sky or a veteran astroimager, AISIG is the group to ask questions, share your expertise and present your latest efforts. Best of all, the group decides what topics to address at upcoming meetings.



Starry Messengers SIG-  
Opening Minds to the Universe

**Meeting: February 9 (Sun) 1:00 PM**

Martha Cooper Library  
1377 N Catalina St  
Contact: Terri Lappin  
Phone: 520-977-1290  
Email: [smmsg@tucsonastronomy.org](mailto:smmsg@tucsonastronomy.org)

The Starry Messengers are working very hard to get our exhibit ready for the Tucson Festival of Books/UA Science City. The festival will be held over the weekend of March 14 & 15. The theme is the Search for Life with an emphasis on the summer launch of the Mars 2020 rover. We will meet on Sunday, February 9th at the Martha Cooper Library to put the finishing touches on our activities.

There will be a training session for all our volunteers on Saturday, March 7th (1pm – 3pm) which is announced in a separate article.

TAAA Ladies Night Out  
Thursday, February 20

Great Conversation! 6:30 pm Delicious Food!

Guadalajara Fiesta Grill

750 N Kolb Rd

(SE side of Kolb, S of Speedway  
between E Rosewood and E 5th Ave)

Preview the menu at [www.ggrill.com](http://www.ggrill.com)

RSVP Susan

[cyzeh@aol.com](mailto:cyzeh@aol.com)

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## 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.

### TIMPA

#### Feb 15 & 21 (Sat & Fri)

Contact Person: Ralph Means  
Email: [fundamentals\[at\]tucsonastronomy.org](mailto:fundamentals[at]tucsonastronomy.org)  
Email: [bookbuyer1769@gmail.com](mailto:bookbuyer1769@gmail.com)  
Phone: 520-460-8770

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!

### Chiricahua Astronomy Complex

#### Feb 21 & 22 (Fri & Sat)

Contact Person/RSVP to: Mike McDowell  
Email: [cac-director\[at\]tucsonastronomy.org](mailto: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.

## 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.

Upon completing the requirements for a program, submit your observations to the TAAA ALCOR. Our ALCOR will review them and then forward them onto the appropriate program coordinator for further review. If they are complete you will be awarded your certificate and pin at one of our meetings.

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



Our ALCOR is Doug Smith

### 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

### Intermediate Programs

- ◆ Advanced Binocular Double Star Observing Program
- ◆ 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
- ◆ Two in the View Observing Program

### Advanced

- ◆ 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
- ◆ Variable Star Observing Program
- ...and more including the Master

## 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).

### Harelson Elementary School Star Party

**Feb 6 (Thu)** **Set-up: 5:30 PM**  
**NW Tucson** **Observing: 6:00 PM to 8:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 4**  
**Cross Streets: Ina/Oracle**

Harelson Elementary School is having a star party for 250 students grades K-6. The school is located at 826 W Chapala Dr. Go west on Ina to Paseo del Norte and turn north and drive to Chapala Dr the school is on the NW corner. Set up on playground behind school. **Four volunteers with scopes are needed for this event.**

### Cottonwood Elementary School Star Party

**Feb 6 (Thu)** **Set-up: 4:30 PM**  
**SE Tucson (Vail)** **Observing: 5:00 PM to 7:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 2**  
**Cross Streets: Houghton/Rita Road**

Cottonwood Elementary School is having a star party (primarily moon viewing) 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. **Two volunteers with scopes are needed for this event.**

### Lulu Walker Elementary School Star Party

**Feb 12 (Wed)** **Set-up: 6:00 PM**  
**NW Tucson** **Observing: 6:30 PM to 7:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 4**  
**Cross Streets: LaCanada/River**

We are supporting the science fair at Lulu Walker Elementary with a star party for 200 students grades K-6. The school is located at 1750 W Roller Coaster Rd. Go north on LaCanada from River to Roller Coaster Rd and turn left. Set up on the open field. **Three volunteers with scopes are needed for this event.**

### Pusch Ridge Christian Academy High School Star Party

**Feb 12 (Wed)** **Set-up: 5:45 PM**  
**NW Tucson (Oro Valley)** **Observing: 7:30 PM to 8:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Oracle/Calle Concordia**

Pusch Ridge Christian High School is having a star party for 16 astronomy students at the K-8 campus. The school is located at 9500 N Oracle Rd. Go east on Calle Concordia then immediate left (north) on Egleston Memorial Dr to school on the right. The viewing location is on the football field court. **No more volunteers with scopes are needed for this event.**

### Tucson Star Party with Astronomy Magazine

**Solar and Star Party @ Pima Community College East**  
**Feb 15 (Sat)**

**Solar Viewing: Set-up: 1:30 PM Viewing: 2:00 PM to Sunset**  
**Night Viewing: Set-up: 5:30 PM Viewing: 6:00 PM to 9:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 10**  
**Cross Streets: Irvington/Fred Enke**

We will be providing solar and night telescopes for this event being held at the Pima Community College East Campus. The campus is located at 8181 E Irvington Rd at the intersection with Fred Enke Dr. Set up on the parking lot by the observatories on the sw-side of the campus. **Three solar scopes and four night scopes plus additional volunteers to assist are needed for this event.**

## TAAA Outreach Events (Cont.)

**Thank You Volunteers!**

Potential Contacts This Month: 1100

Volunteers Needed This Month: 29

### Star Party for UA Astronomy Students

**Feb 16 (Sun)** **Set-up: 6:30 PM**  
**Far West Tucson** **Observing: 7:00 PM to 9:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 5**  
**Cross Streets: Kinney Road/Mile Wide**

We're hosting a star party for UA students taking general sciences astronomy course. About 70 students are expected to attend this event held at the Red Hills Visitor Center at the Western side of the Saguaro National Park. This is located at 2700 N Kinney Rd. **Three volunteers with scopes are needed for this event.**

### Robins K- 8 Star Party (NSN Toolkit)

**Feb 18 (Tue)** **Set-up: 6:00 PM**  
**NW Tucson** **Observing: 6:30 AM to 7:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Ruthrauff/Silverbell**

Robins K-8 is having a star party and NSN Toolkit demonstration for 150 students grades K-5. The school is located at 3939 N Magnetite Lane. From Ruthrauff go south on Silverbell to Sweetwater turn west on Sweetwater to Willemite Dr and go south to Magnetite Lane and the school. The viewing location is TBD. **Three volunteers with scopes and a NSN Toolkit volunteer are needed for this event.**

### Saguaro National Park East Star Party

**Feb 20 (Thu)** **Set-up: 6:15 PM**  
**Far West Tucson** **Observing: 7:00 PM to 9:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Old Spanish Trail/Escalante**

We're supporting the Monthly star party that Saguaro National Park East is hosting. The park is located at 3693 S Old Spanish Trail. From I-10 Exit 275 go north on Houghton for ~8 miles to Escalante, turn east on Escalante for 2 miles to Old Spanish Trail and go north on Old Spanish for .3 miles to the park entrance. ALTERNATE: From Houghton/22nd St go south on Houghton to Old Spanish Trail. East (left) on Old Spanish Trail 2.8 miles to Park entrance. Setup on the Visitor Center parking Lot. **Three volunteers with scopes are needed for this event.**

### Harvest Homeschoolers Co-op Star Party

**Feb 21 (Fri)** **Set-up: 6:00 PM**  
**Sonoita** **Observing: 6:30 PM to 8:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 2**  
**Cross Streets: I-10/Hwy 83**

Harvest Homeschoolers Co-op is having a star party for 35 students grades K-9. The star party location is at 30 Thunderhead Trail. From I-10/Hwy 83 go south on 83 Sonoita. At the 83/82 junction, continue south on 83 which turns east. Stay on 83 to Thunderhead Trail and turn south to house on right. The viewing Location is TBD. **Two volunteers with scopes are needed for this event.**

## TAAA Outreach Events (Cont.)

### Ironwood Picnic Area Public Star Party

Feb 22 (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 for the Pima County Natural Resources, Parks and Recreation. 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. **We still need three volunteers with scopes for this event.**

### Borman Elementary @ Davis Monahan AFB Solar Party

Feb 26 (Wed)

Set-up: 3:30 PM

East Tucson

Observing: 4:00 PM to 6:00 PM

Leader: Jim Knoll

Volunteers Needed: 2

Cross Streets: Golf Links/Craycroft

Borman Elementary is having a solar party for 100 students. The school is located at 6630 Lightning Dr. Enter DM AFB at Craycroft Gate. At the first light, turn left on Quijota Blvd, turn Left on Mustang Dr, turn left on E Lightning Dr to school on the right. Setup on the sidewalk at front of school. **Two volunteers with solar scopes are needed for this event.**

### Sahuarita Science Technology (SciTech) Expo (SOLAR)

Sahuarita Middle School

Feb 27 (Thu)

AM: Set-up: 7:30 AM

Observing: 8:30 AM to 12:30 PM

PM: Set-up: 11:30 AM

Observing: 12:30 PM to 3:30 PM

Sahuarita

Leader: Jim Knoll

Volunteers Needed: 10

Cross Streets: I-19/Sahuarita Rd

We are supporting the Sahuarita SciTech Expo for 1200 students grades 6-8 At Sahuarita Middle School. The school is located at 350 W Sahuarita Rd. From exit 75 on I-19 go east and turn into the Sahuarita District Auditorium parking lot and park as directed. Set up scopes in open area by the Middle School gym. NSN toolkits will be set up in auditorium. **Two to three more volunteers for NSN Toolkits scopes are needed for this event.**

### Catalina High School Star Party

Feb 28 (Fri)

Set-up: 6:00 PM

Central Tucson

Observing: 6:30 PM to 8:30 PM

Leader: Jim Knoll

Volunteers Needed: 2

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. **Two volunteers with scopes are needed for this event.**



## Benefits of Night Sky Network Membership

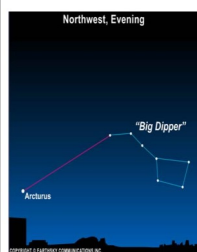
All TAAA members are eligible for a Night Sky Network account. There is no additional cost to you and it gives you access to these and more services. If you haven't activated your Night Sky Network account, contact the treasurer or Terri Lappin. To log into your Night Sky Network account, visit <http://nightsky.jpl.nasa.gov/login.cfm>

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## Observing Planning Tools

Night Sky Planner October 31, 2015



IN THE SKY  
Halloween ghost of the summer sun

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Track Your  
Volunteer  
Hours & Mileage

It's free with your TAAA Membership!

Upcoming Events



Developed and Managed by the Astronomical Society of the Pacific