

February 2019

Observing our Desert Skies  
since 1954



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TUCSON AMATEUR ASTRONOMY ASSOCIATION

# Monthly Events Bulletin

## February 1st General Meeting

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

### **Introductory Presentation 6:30pm**

*Astronomical League's NEW  
Observing Programs  
presented by  
Douglas Smith*

Douglas Smith, Program Coordinator from the Astronomical League, will present a summary of the AL's NEW observing programs added since February 2018. He will give us a heads up on the next Astronomical League observing program workshop. And he will discuss the upcoming Messier Marathon in March. Signup sheets will be available at the Feb meeting.

### **Invited Lecture 7:30pm**

*Astronomy & Satellite Tracking  
at Steward Observatory  
presented by  
Dr. Eric C. Pearce, Steward  
Observatory, University of Arizona*

Dr. Eric C. Pearce has been with Steward Observatory since 2016. His primary area of research is developing advanced systems and techniques to discover, track, and categorize artificial Earth-orbiting satellites. Dr. Pearce was previously Telescope Group leader at the Giant Magellan Telescope (GMT) project office in Pasadena, California. He holds a Ph.D. in Physics from the New Mexico Institute of Mining and Technology.

Dr. Pearce's presentation focuses on the global network of telescopes and radar systems used to track nearly 5000 satellites and 14000 other man-made objects currently orbiting Earth. The nation's ability to detect, track, identify, and maintain custody of these objects is essential to safely use space for both civil and military purposes. This mission is the primary responsibility of the U.S. Air Force Space Command. Dr. Pearce will explore the history of our role in developing this mission, our current stage of development, and future challenges. He will include information about its revitalization of astrographs (telescopes designed for the sole purpose of astrophotography).

### **Inside this Bulletin**

CAC Star Party  
Feb 1 & 2

TIMPA Star Party  
Feb 2 & 8

TAAA BoD Meeting  
Feb 13

AFSIG Meeting  
Feb 14

Ladies Night Out  
Feb 21

Announcements  
Page 6

### **Comments From the President**

We are learning constantly through our own experiences. In addition, vicarious learning – learning through the experiences of others – provides us with a wide realm of knowledge.

But, times occur when our viewpoints don't mesh with those of our peers; when we believe we need to be brave and forge a new path; when, in this instance, we believe our leadership is needed.

That was where the TAAA Board found itself over a year ago when it strongly believed that TAAA should have policies/procedures regarding working with minors. While some other program may exist, In our investigations of our peers, we only found one private, non-profit astronomy club that made any provisions at all for working with minors.

The TAAA Board believes that TAAA should take steps to protect minors; educate and prepare TAAA members; as well as strengthen, and protect, TAAA from vulnerabilities related to child mistreatment. As a result, we developed a sensible and practical plan for continuing TAAA's work with minors.

On behalf of the TAAA Board and Leaders, I wish to thank our TAAA members for their support of these efforts. We will keep you informed as we gradually implement the program in 2019.

Mae Smith

## 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
General Meeting Mae Smith	Feb 1 (Fri) Steward Observatory 933 N Cherry	6:30 PM	
CAC Star Party Mike McDowell	Feb 1/2 (Fri/Sat) CAC Sunsites AZ	Sunset	
TIMPA Star Party Dennis McMacken	Feb 2 (Sat) TIMPA 3250 N Reservation Rd	Sunset	
Public Star Party Far West Tucson Jim Knoll	Feb 2 (Sat) Ironwood Picnic Area 7300 W Hal Gras Rd	6:30 PM	
Outreach Star Party Central Tucson Jim Knoll	Feb 5 (Tue) Dodge Middle School 5831 E Pima	6:00 PM	
Outreach Solar Party East Tucson Jim Knoll	Feb 6 (Wed) Borman Elementary @ DM 6630 Lightning Dr	4:00 PM	
Outreach Star Party Elfrida, AZ (Near CAC) Jim Knoll	Feb 7 (Thu) Elfrida Library 10552 N Hwy 191	6:30 PM	
Outreach Solar/Star Vail, AZ Jim Knoll	Feb 7 (Thu) Cottonwood Elementary 9950 Rees Loop	5:00 PM	
Outreach Star Party NW Tucson Jim Knoll	Feb 7 (Thu) Harelson Elementary 826 W Chapala Dr	6:00 PM	
Outreach Star Party NW Tucson Jim Knoll	Feb 7 (Thu) Lulu Walker Elementary 1750 W Roller Coaster Rd	5:30 PM	
Outreach Star Party NE Tucson Jim Knoll	Feb 8 (Fri) Collier Elementary 3900 N Bear Canyon Rd	6:30 PM	
Outreach Star Party Central Tucson Jim Knoll	Feb 8 (Fri) Khalsa Montessori 3244 E Camden St	6:00 PM	
Outreach Star Party SE Tucson Jim Knoll	Feb 9 (Sat) Tucson Star Party @ PCC East Campus 8181 E Irvington Rd	10:00 AM	
Public Star Party NE Tucson Jim Knoll	Feb 9 (Sat) Agua Caliente Park 12325 E Roger Rd	6:30 PM	
Outreach Star Party NW Tucson Jim Knoll	Feb 10 (Sun) UA Astronomy Program Saguaro Natl Park West 2700 N Kinney Rd	7:00 PM	
Outreach Star Party NW Tucson Jim Knoll	Feb 12 (Tue) Murphy-Wilmot Library 530 N Wilmot Rd	5:45 PM	
AFSIG Meeting (Beginners) Connor Justice	Feb 14 (Thu) USGS Bldg Room 253 520 N Park Ave	6:30 PM	

### This Month's Events Cont.

Outreach Star Party Central Tucson Jim Knoll	Feb 15 (Fri) Catalina High School 3645 E Pima St	6:00 PM
Ladies Night Out Susan O'Connor	Feb 21 (Wed) Bazil's 4777 E Sunrise	6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Feb 24 (Sun) UA Astronomy Program Saguaro Natl Park West 2700 N Kinney Rd	7:00 PM
Outreach Event Sahuarita Jim Knoll	Feb 26 (Tue) Sahuarita Middle School 350 W Sahuarita Rd	6:00 AM

### Future Events

Member Events	
Mar 1 (Fri)	General Meeting
Mar 1/2 (Fri/Sat)	CAC Star Party
Mar 13 (Wed)	Board Meeting
Mar 14 (Thu)	AFSIG Meeting
Mar 21 (Thu)	Ladies Night Out
Outreach Events	
Mar 2 (Sat)	Ironwood Picnic Area
Mar 2/3 (Sat/Sun)	Tucson Festival of Books
Mar 5 (Tue)	Innovation Academy
Mar 7 (Thu)	Leman Academy
Mar 9 (Sat)	Girl Scouts of Southern Arizona
Mar 9 (Sat)	Oracle State Park
Mar 9 (Sat)	Agua Caliente Park
Mar 22 (Fri)	Khalsa Montessori
Mar 23 (Sat)	Chiricahua National Monument
Mar 27 (Wed)	Fruchtendler Elementary School
Mar 28 (Thu)	St. Michael's School
Mar 29 (Fri)	Academy of Tucson
Mar 30 (Sat)	Catalina State Park



**Current Campaign:**  
Jan 27 - Feb 5  
Feb 26 - Mar 7

Visit [globeatnight.org](http://globeatnight.org)

## Special Interest Group (SIG) Activities

### Astro-Imaging SIG (AISIG)

**Meeting: TBD**

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: Feb 14 (Thu) 7:00 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 join us for a presentation from the fundamentals of amateur astronomy. Dennis Means will start the night with a talk about the southern constellation Caelum. For our main topic, Ralph Means will be presenting "Discussions of some Messier Objects".

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



Starry Messengers SIG  
Opening Minds to the Universe

**Meeting: Mar 21 (Mon) 8:30P**

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.

Let Terri Lappin know if you want to become involved with this valued service we provide to the community. At our next meeting we'll discuss our exhibit for the 2019 Tucson Festival of Books in March. Our exhibit will feature the Moon and the Apollo lunar landings.

## 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

**Feb 1 & 2 (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

**Feb 2 & 8 (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](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 [smisg@tucsonastronomy.org](mailto:smisg@tucsonastronomy.org).

### Ironwood Picnic Area Public Star Party

**Feb 2 (Sat)** **Set-up: 6:00 PM**  
**Far West Tucson** **Observing: 6:30 PM to 8:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 4**  
**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. **Three more volunteers with scopes are needed for this event.**

### Dodge Traditional Magnet Middle School Star Party

**Feb 5 (Tue)** **Set-up: 5:30 PM**  
**Central Tucson** **Observing: 6:00 PM to 8:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Wilmot/Pima St**

The Dodge Traditional Magnet Middle School is having a star party for 100 students in grades 6 to 8 and their family members. The school is located at 5831 E Pima St. The school is on the NW corner of Pima & Sahuara. Turn right into the school off Pima St. Set up on the grass field. **Three volunteers with scopes are needed for this event.**

### Borman Elementary School @ DM AFB Solar/Moon Party

**Feb 6 (Wed)** **Set-up: 3:30 PM**  
**East Tucson** **Observing: 4:00 PM to 5:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 4**  
**Cross Streets: Craycroft/Golf Links**

Borman Elementary School is having a moon/solar party and NSN Toolkit presentation for 150 students. The school is located in Davis Monthan AFB at 6630 Lightening Dr. Enter DM AFB at the Craycroft Gate. At first light, turn left on Quijota Blvd. Turn Left on Mustang Dr. Turn left on E Lightning Dr to school on the right. Viewing Location: Playground on SE side of the building or parking circle on SW side of the building. field. **Two more volunteers with scopes and one NSN Toolkit volunteer are needed for this event.**

### Elfrida Library Star Party

**Feb 7 (Thu)** **Set-up: 6:00 PM**  
**Elfrida AZ** **Observing: 6:30 PM to 8:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 2**  
**Cross Streets: Hwy 191/Gleeson Rd**

TAAA is supporting a solar party for about 25 people at the Elfrida Public Library. The library is located at 10552 N Hwy 191. Take I-10 or Dragoon 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.**

## TAAA Outreach Events (Cont.)

**Thank You Volunteers!**

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

### Cottonwood Elementary School Solar/Star Party

**Feb 7 (Thu)** **Set-up: 4:30 PM**  
**SE Tucson (Vail)** **Observing: 5:00 PM to 7:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Houghton/Rita Road**

Cottonwood Elementary School is having a solar/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 volunteers with scopes are needed for this event.**

### Harelson Elementary School Star Party

**Feb 7 (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 300 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. **Three more volunteers with scopes are needed for this event.**

### Lulu Walker Elementary School Star Party

**Feb 7 (Thu)** **Set-up: 5:00 PM**  
**NW Tucson** **Observing: 5:30 PM to 7:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 5**  
**Cross Streets: LaCanada/River**

We are supporting Lulu Walker Elementary with a star party and NSN Toolkit Presentation (Exploring the Solar System) for 150 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. **Four volunteers with scopes and one NSN Toolkit volunteer are needed for this event.**

### Collier Elementary School Star Party

**Feb 8 (Fri)** **Set-up: 5:30 PM**  
**NE Tucson** **Observing: 6:30 PM to 8:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Tanque Verde/Bear Canyon**

Collier Elementary School is having a star party for 50 students. Collier Elementary School is located at 3900 N Bear Canyon Rd. Go north on Bear Canyon for 1.3 miles to school (on the right). Setup on the fields behind the school. Access the field off the u-shape drive just before the school (small parking lot with gate access). **Two more volunteers with scopes are needed for this event.**



## TAAA Outreach Events (Cont.)

### Khalsa Montessori School Star Party

**Feb 8 (Fri)** **Set-up: 5:30 PM**  
**Central Tucson** **Observing: 6:00 PM to 7:30 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Speedway/Country Club**

Khalsa Montessori is having a star party for 75 students grades K-5. The school is located at 3244 E Camden St. Go north on Country Club for .2 miles, right on Fairmount, left on Howard, the school is on the left. Setup on the playground or parking lot. Set up on the open field. **Three volunteers with scopes are needed for this event.**

### Tucson Star Party with Astronomy Magazine

#### Solar and Star Party @ Pima Community College East

**Feb 9 (Sat)**  
**Solar Viewing: Set-up: 9:30 AM Viewing: 10:00 AM to Sunset**  
**Night Viewing: Set-up: 5:30 PM Viewing: 6:00 PM to 9:00 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 6**  
**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. **Two volunteers with a solar scope and four volunteers with night scopes are needed for this event.**

### Agua Caliente Park Public Star Party

**Feb 9 (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 70 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.**

### UA Astronomy Program Star Party

**Feb 10 (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 50 students are expected to attend this event held at the Red Hills Visitor Center at Saguaro National Park West. This is located at 2700 N Kinney Rd. Set up at the parking lot next to the Visitor Center. **Five volunteers with scopes are needed for this event.**

## TAAA Outreach Events (Cont.)

### Murphy-Wilmot Public Library Star Party

**Feb 12 (Tue)** **Set-up: 5:00 PM**  
**East Tucson** **Observing: 5:45 PM to 7:45 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 3**  
**Cross Streets: Speedway/Wilmot**

TAAA is supporting a star party Murphy-Wilmot Public Library. The library is located at 530 N Wilmot. From Speedway go north on Wilmot. The library is on the right (east) side of Wilmot. Setup is on the grassy area behind the library. **No more volunteers are needed for this event.**

### Catalina High School Star Party

**Feb 15 (Fri)** **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.**

### UA Astronomy Program Star Party

**Feb 24 (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 50 students are expected to attend this event held at the Red Hills Visitor Center at Saguaro National Park West. This is located at 2700 N Kinney Rd. Set up at the parking lot next to the Visitor Center. **Five volunteers with scopes are needed for this event.**

### Arizona Science Technology Festival @

#### Sahuarita Middle School

**Feb 26 (Tue)** **Set-up: 6:00 to 7:30 AM**  
**Far West Tucson** **Observing: 7:45 AM to 3:15 PM**  
**Leader: Jim Knoll** **Volunteers Needed: 4**  
**Cross Streets: Sahuarita Road/Rancho Sahuarita**

The TAAA is providing solar scopes for the Arizona Science and Technology Festival for the Sahuarita Unified School District (SUSD). This event may also include NSN Toolkits as part of the indoor exhibits. The Festival will be at the Sahuarita Middle School located at 350 W Sahuarita Rd.

Indoor exhibits will be in the gym. Solar observing will be outside the gym main entrance. The event will run from 7:45 AM to 3:15 PM. SUSD will have 5 schools cycle through the event every 45 minutes with 15 minute breaks in between. Lunch is from 11:45 to 12:30 and will be provided. 1200 students are expected for this event. **Four volunteers with scopes are needed for this event.**

## 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
Feb 18 7:30PM	Dr. Jenny Greene Princeton University	<i>Marc Aaronson Memorial Lecture</i> <i>Tiny But Powerful: The Search for</i> <i>Intermediate-mass Black Holes</i>	Steward Observatory Lecture Hall N210	<a href="http://www.as.arizona.edu/public-evening-lecture-series">http://www.as.arizona.edu/public-evening-lecture-series</a>
Feb 25 7:30PM	Dr. Erika Hamden Steward Observatory	<i>The Ridiculous World of Scientific</i> <i>Ballooning</i>	Steward Observatory Lecture Hall N210	<a href="http://www.as.arizona.edu/public-evening-lecture-series">http://www.as.arizona.edu/public-evening-lecture-series</a>

## Introduction to the Fundamentals of Astronomy

The Astronomy Fundamentals Special Interest Group (AFSIG) will offer its popular **Introduction to the Fundamentals of Astronomy** class again this Spring. The dates are: March 16, March 23, and March 30, 2019.

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.

**TAAA Ladies Night Out**

**Wednesday, February 21**

*Great Conversation!* **6:30 pm** *Delicious Food!*

**Bazil's**

**4777 E Sunrise**

(NE corner of Sunrise and Swan)

Preview menu at [bazilstucson.com](http://bazilstucson.com)

RSVP Susan at [cyzeh@aol.com](mailto:cyzeh@aol.com)

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## Announcements

- The January **Board of Directors Meeting** will be held on Wednesday, February 13th, 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.
- **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](mailto:membership[at]tucsonastronomy.org).
- **Volunteer needed to edit and post video-recordings of Member Meetings.** Contact Mae Smith at [ssmith@email.arizona.edu](mailto:ssmith@email.arizona.edu).
- **Web comments, suggestions or problems,** contact our team [atwebteam@tucsonastronomy.org](mailto:atwebteam@tucsonastronomy.org).
- **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.