

April 2017

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TUCSON AMATEUR ASTRONOMY ASSOCIATION

Monthly Events Bulletin

April 7th General Meeting

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

UA Spring Fling April 7 – 9

Spring Fling starts April 7, so expect congested traffic and limited parking.

Introductory Presentation 6:30pm

Seasonal Night Sky

Objects

presented by

Dr. Mary Turner

TAAA Member

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 use of astronomical data, images, and mythology brings to life the seasonal changes in the night sky.

Invited Lecture

7:30pm

Satellite Galaxies and Dwarfs in the

Local Group

presented by

Ekta Patel

Ekta Patel is a third year graduate student in UA's Department of Astronomy and Steward Observatory, pursuing her doctoral degree in Astronomy & Astrophysics. Ekta is a National Science Foundation Graduate Research Fellow and holds a B.A. in physics from New York University. Her theoretical research focuses on the orbital evolution of satellite galaxies.

Ekta will review the current classification system used to identify types of galaxies. She will then present an overview of satellite galaxies and how astronomers use them to understand the formation and evolution of the Milky Way and Andromeda galaxies. She will explain her current research, which uses computer simulations of the universe to study satellite galaxies in a context beyond the scope of what observations alone can teach us.

April 29 is Astronomy Day

The fourth Annual Tucson Astronomy Festival will be held on Astronomy Day, April 29. This is the biggest TAAA sponsored event of the year. Several local organizations will be invited to join us at Brandi Fenton Memorial Park. The TAAA will have Solar and Evening Telescopes and interactive exhibits to explore various astronomy subjects. Experts will also be available to assist amateur astronomers with using their own equipment. The festival will begin at noon and run until 9:00 PM. The interactive exhibits and observing will be at Ramada A and the adjoining grassy area. Jim Knoll will handle the telescope volunteers. We also need TAAA members to help with the interactive exhibits. Please contact Terri Lappin if you want to volunteer.

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Apr 28 & 29

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(Date Change)
Apr 1, 28 & 29

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(Date Change)
Apr 19

Astronomy Day
Apr 29

TAAA Elections in May

TAAA elections will be held during the May general meeting. We will be voting for the Board of Directors and for members of the Nomination and Volunteer Resource Committee (NVRC). Here is the slate of candidates for the upcoming elections.

President	Ben Bailey (Incumbent)
Vice-President	Mae Smith (Incumbent)
Secretary	Chuck Hendricks (Incumbent)
Treasurer	Ed Foley (Incumbent)
Members-at-Large (Vote for 3 of 4)	Bill Lofquist (Incumbent) John Meade (Incumbent), Bill Wheeler
	Ronald Henke
NVRC	Shawn Hermann (Incumbent) Two write-ins required

This Month in Brief

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
	Public Star Party NE Tucson Jim Knoll	Apr 22 (Sat) Agua Caliente Park 12325 E Roger Road	7:00 PM
	Public Star Party NW Tucson (Oracle) Jim Knoll	Apr 22 (Sat) Ora Mae Harn Park 13250 N Lon Adams Rd	6:30 PM
	Outreach Star Party SE Tucson Jim Knoll	Apr 27 (Thu) Copper Ridge Elementary 17650 S Canyon Edge Trail	10:00 AM
	Outreach Star Party SE Tucson Jim Knoll	Apr 28 (Fri) Sycamore Elementary 16701 S Houghton Rd	7:00 PM
	CAC Star Party John Kalas	Apr 28/29 (Fri/Sat) Chiricahua Astronomy Complex	Sunset
	TIMPA Star Party Dennis McMacken	Apr 28/29 (Fri/Sat) TIMPA 3250 N Reservation Rd	Sunset
	Astronomy Festival Central Tucson Jim Knoll	Apr 29 (Sat) Brandi Fenton Park 3482 E River Rd	11:30 AM
	Outreach Star Party Far East Tucson Jim Knoll	May 2 (Tue) Agua Caliente Elementary 11420 E Limberlost Rd	7:00 PM
	Outreach Star Party Mt Lemmon Jim Knoll	May 4 (Thu) Whispering Pines Camp Organization Ridge Road	7:00 PM

TIMPA Star Party Dennis McMacken	Apr 1 (Sat) TIMPA 3250 N Reservation Rd	Sunset
Public Star Party NW Tucson (Oracle) Jim Knoll	Apr 1 (Sat) Catalina State Park 11570 N Oracle Rd	7:00 PM
Outreach Star Party Far West Tucson Jim Knoll	Apr 2 (Sun) Redhills Visitor Center 2700 N Kinney Rd	7:30 PM
General Meeting Ben Bailey	Apr 7 (Fri) Steward Obs. Rm N210 933 N Cherry Ave	6:30 PM
AISIG Meeting Jim Heasley	Apr 10 (Mon) Total Wine 4370 N Oracle Rd	7:00 PM
AFSIG Meeting (Beginners) Dennis McMacken	Apr 13 (Thu) USGS Bldg Room 253 520 N Park Ave	6:30 PM
Public Star Party Far West Tucson Jim Knoll	Apr 15 (Sat) Ironwood Picnic Area 7300 West Hal Gras Rd	7:30 PM
Ladies Night Out Susan O'Connor	Apr 19 (Wed) Bazil's 4777 E Sunrise	6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Apr 20 (Thu) Leman Academy 7720 N Silverbell Rd	6:00 PM (NSN) 7:00 PM
Outreach Star Party SE Tucson Jim Knoll	Apr 21 (Fri) Esmond Station K-12 9400 S Atterbury Wash Way	7:00 PM

Future Events

Member Events	
May 5 (Fri)	General Meeting
May 10 (Wed)	Board Meeting
May 11 (Thu)	AFSIG Meeting
May 15 (Mon)	AISIG Meeting
May 15 (Mon)	SMSIG Meeting
May 18 (Thu)	Ladies Night Out
May 20 (Sat)	CAC Star Party/Dedication Ceremony
May 20/26 (Sat/Fri)	TIMPA Star Party
May 26/27 (Fri/Sat)	CAC Star Party

Outreach Events	
May 2 (Tue)	Agua Caliente Elementary
May 4 (Thu)	Ventana Vista
May 20 (Sat)	Agua Caliente Park
May 20 (Sat)	Sonoran Desert Museum
May 27 (Sat)	Ironwood Picnic Area

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Special Interest Group Activities

Astronomy Fundamentals SIG (AFSIG)

Meeting: Apr 13 (Thu) 6:30 PM
 U.S.G.S. Building, Room 253 (520 North Park Ave)
 Contact: Dennis McMacken Phone: 520-609-7860
 Email: fundamentals[at]tucsonastronomy.org

Come join us for a presentation from the fundamentals of amateur astronomy. This month Stephen Ferris will discuss "Cosmology". The "Constellation of the Month" will be presented by Bill Yohey.

Dennis McMacken is in need of TAAA members to present the *Constellation of the Month*, so please contact him if you want to talk about your favorite constellation or one that you want to learn about.

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 ways 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 AFSIG meets the second Thursday of each month in the USGS Building located on the NE corner of Park and 6th Street. The meeting room is on the second floor. After 5pm, free parking can be found across 6th Street. Go south onto Park at 6th St. The parking lot is behind The China Pasta House accessible by an alley way. A fee is charged to use the parking garage to the east. An elevator is available on request.

Astro-Imaging SIG (AISIG)

Meeting: Apr 10 (Mon) 10:00 AM
 Location: Total Wine (4370 N Oracle Rd)
 Contact: Jim Heasley Phone: 520-268-8586
 Email: astro-photo[at]tucsonastronomy.org

The April meeting will be at the Total Wine store located at Oracle and Wetmore.



Starry Messengers SIG
 Opening Minds to the Universe

Next Meeting: May 15 (Mon) 6:30PM
 Beyond Bread (3026 N Campbell)
 Contact: Terri Lappin
 Phone: 520-977-1290
 Email: smsig[at]tucsonastronomy.org

Another success! We had over 3300 people visit our booth or look through solar scopes at the 2017 Tucson Festival of Books/JA ScienceCity. We are now preparing for the 4th Annual Astronomy Festival which will be held on Astronomy Day, April 29th. This is the biggest TAAA sponsored event of the year. Several local organizations will be invited to join us at Brandi Fenton Memorial Park. Jim Knoll will handle the telescope volunteers but we also need TAAA members to help at our exhibit. Please contact Terri Lappin (see above) if you want to help.

The Starry Messengers will meet on May 15th as indicated above. Over the summer months we'll be testing out ideas for our electromagnetic spectrum toolkit.

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 Site

Apr 28 & 29 (Fri & Sat)
 Contact Person/RSVP to: John Kalas
 Email: cac-director[at]tucsonastronomy.org
 Phone: 520-405-3798

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, a picnic Ramada, and a full bathroom facility with shower 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 Site

Apr 28 & 29 (Fri & Sat)
 Contact Person: Dennis McMacken
 Email: fundamentals[at]tucsonastronomy.org
 Phone: 520-609-7860

The AFSIG hosts the TIMPA star parties. An AFSIG representative will open the gate for an evening of viewing. The Gila Monster Observatory with its Meade 14" Schmidt-Cassegrain telescope will be open for your viewing pleasure. The TIMPA site features a large parking area and full restroom facilities. Be prepared for cool temperatures after sunset. Guests are welcome, accompanied by a TAAA member. We hope to see you there!

TAAA Ladies Night Out

Wednesday, April 19

6:30 pm

Bazil's

4777 E Sunrise

(NE corner of Sunrise and Swan)

Preview the menu at <http://www.bazilstucson.com>

RSVP Susan

520-546-2961 or cyzeh@aol.com

TAAA Outreach Events

Members are asked to support these outreach events. Details and maps can be obtained by logging into your Member Planet account. Sign up at a meeting, respond to Jim Knoll's email requests, or pick up the phone. Signing up is important so you can be contacted in case of cancellation. Contact Jim at school-sp-volunteers@tucsonastronomy.org or 520-241-3113. If interested in being an Astronomy Guide and presenting projects from the Night Sky Network Outreach Toolkits, contact Terri Lappin at smsig@tucsonastronomy.org.



Potential Contacts This Month: 5800
Volunteers Needed This Month: 50

Catalina State Park Public Star Party

Apr 1 (Sat) **Set-up: 6:30 PM**
NW Tucson **Observing: 7:00 PM to 10:00 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. **Five more volunteers with scopes are needed for this event.**

UA Astronomy Program

Apr 2 (Sun) **Set-up: 7:00 PM**
Far West Tucson **Observing: 7:30 PM to 9:30 PM**
Leader: Jim Knoll **Volunteers Needed: 5**
Cross Streets: Kinney Rd/Saguaro National Park (West)

The UA Astronomy Program is having star party for about 50 students at the Redhills Visitor Center in Saguaro National Park (West). The Park is located at 2700 W Kinney Rd. The viewing location is in the Redhills Visitor Center parking lot. **Four more volunteers with scopes are needed for this event.**

Ironwood Picnic Area Public Star Party

Apr 15 (Sat) **Set-up: 7:00 PM**
Far West Tucson **Observing: 7:30 PM to 9:30 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. **Three volunteers with scopes are needed for this event.**

Leman Academy of Excellence

Apr 20 (Thu) **Set-up: 6:30 PM**
NW Tucson **Observing: 7:00 PM to 8:30 PM**
Leader: Jim Knoll **Volunteers Needed: 4**
Cross Streets: Silverbell/Cortaro

Leman Academy of Excellence is having a star party and NSN Toolkit demonstration for 250 students and their family members. Setup for the NSN Toolkit will be at 5:30 PM and will run from 6:00 PM to 8:00 PM. The school is located at 7720 N Silverbell Rd. The viewing location will be in the school courtyard. **A volunteer for the NSN Toolkit and three more volunteers with scopes are needed for this event.**

Esmond Station K-8 Iron Horses

Apr 21 (Fri) **Set-up: 7:00 PM**
SE Tucson **Observing: 7:30 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 4**

Cross Streets: Houghton/Mary Ann Cleveland

Esmond Station is having a star party and Night Sky Network Space Rocks tool kit demonstration for 150 students in K to 8th grade and their family members. The Esmond Station is located at 9400 S Atterbury Wash Way. The viewing location will be the basketball court. **Three more volunteers with scopes are needed for this event.**

Camping Under the Stars 2017

Apr 22 (Sat) **Set-up: 6:30 PM**
NW Tucson **Observing: 7:00 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**

Cross Streets: I-10 (Exit 236)/Sandario

Marana Parks and Recreation will be holding the Camping Under the Stars 2017 event at Ora Mae Harn Park. This is an all day and overnight event which will include a public star party. Ora Mae Harn Park is located at 13250 N Lon Adams Rd. Set up is near the playground. **Three volunteers with scopes are needed for this event.**

Agua Caliente Park Public Star Party

Apr 22 (Sat) **Set-up: 7:00 PM**
NE Tucson **Observing: 7:30 PM to 9:30 PM**
Leader: Jim Knoll **Volunteers Needed: 4**

Cross Streets: Roger/Soldier Trail

We are supporting a public star party at Aqua Caliente Park for the Pima County Natural Resources, Park & Recreation. About 50 people attend these regularly scheduled star parties at the Agua Caliente Park. The park is located at 12325 E Roger Road. This is near Soldier Trail. Setup will be at the bus lanes at the north end of parking lot. **Three more volunteers with scopes are needed for this event.**

Copper Ridge Elementary School Star Party

Apr 27 (Thu) **Set-up: 7:00 PM**
SE Tucson **Observing: 7:30 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**

Cross Streets: Sahuarita/Harrison

Copper Ridge Elementary School is having an event for "Week of the Young Child" which includes a picnic under the stars and a star party for kids aged 3-10. About 50 people are expected to attend. The school is located at 17650 S Canyon Edge Trail and the viewing location will be in the school courtyard. **Three volunteers with scopes are needed for this event.**

Sycamore Elementary School Star Party

Apr 28 (Fri) **Set-up: 7:00 PM**
SE Tucson **Observing: 7:30 PM to 9:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**

Cross Streets: Sahuarita/Houghton

Sycamore Elementary School is having a star party for kids aged 3-10. About 75 people are expected to attend. The school is located at 16701 S Houghton Rd. The viewing location will be in the school basketball court or ball field. **Two more volunteers**

TAAA Outreach Events (cont.)

National Astronomy Day Star Party

Apr 29 (Sat)

Central Tucson

Leader: Jim Knoll

Volunteers Needed: AMAP

Cross Streets: River/Alvernon

Set-up: NSN 11:00 AM/Solar 11:30 AM

Start: Solar/NSN 12:00 PM

Set-up: Night 6:30 PM

Observing: 7:00 PM to 9:00 PM

Astronomy Day is a national event and the TAAA will have its largest public outreach during this 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 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.**

LDS Star Party @ Denny Dunn Park (Tentative)

Apr 29 (Sat)

Set-up: 6:30 PM

NW Tucson

Observing: 7:00 PM to 9:00 PM

Leader: Jim Knoll

Volunteers Needed: 2

Cross Streets: Massingale/Old Father

Church of Jesus Christ of Latter Day Saints is having a star party for 30 people of all ages at Denny Dunn Park. The park is located at 4400 W Massingale Rd. **Two volunteers with scopes are needed for this event.**

Agua Caliente Elementary School Star Party

May 2 (Tue)

Set-up: 6:30 PM

Far East Tucson

Observing: 7:00 PM to 9:00 PM

Leader: Jim Knoll

Volunteers Needed: 4

Cross Streets: Limberlost/Melpomene

Agua Caliente Elementary School is having a star party for 200 students and family members. The school is located at 11420 E Limberlost Rd. Enter the soccer field through the gate on Homestead and setup on the north end of the soccer field. **Two more volunteers with scopes are needed for this event**

Girl Scouts Whispering Pines Camp Star Party

May 4 (Thu)

Set-up: 6:30 PM

NE Tucson (Mt Lemmon)

Observing: 7:00 PM to 9:00 PM

Leader: Jim Knoll

Volunteers Needed: 3

Cross Streets: Mt Lemmon Hwy (Mile20)/Organization Ridge

Ventana Elementary School will be having a star party for 100 students at the Girl Scouts Whispering Pines Camp on Mt Lemmon. The camp is located at the end of Organization Ridge Rd. Setup will be in the parking lot. **Three volunteers with scopes are needed for this event.**

Announcements

- The TAAA kicked off its **Gateway to the Galaxy** capital campaign last month. The campaign is seeking to raise funds from corporations and foundations who support our mission of science education outreach. These funds will be used at CAC to complete the large roll-off roof observatory, which will house 4 telescopes, and provide funding for our new Multi-Purpose Building, with meeting space and sleeping rooms.
- The April **Board of Directors Meeting** will be held on April 12th at 6:30 PM in the UMC Cafeteria, Rm 2500F (1500 N Campbell Ave).
- **Attention: TAAA Elections at the May General Meeting**
- The **27th Grand Canyon Star Party**, an outreach event shared between astronomers from around North America and the National Park Service at Grand Canyon National Park, will be June 17 through June 24, 2017. Early planning is advised. Please join us for one night, all eight nights, or anything in between. For details contact the South Rim GCSP Coordinator, TAAA member Jim O'Connor, at gcsp[at]tucsonastronomy.org or visit: <http://tucsonastronomy.org/upcoming-events/grand-canyon-star-party/>
- **Have you signed up for Member Planet?** This is where the TAAA Member's Only online information can be found. It's where you can learn about member's events, renew your membership online, renew magazine subscriptions, pay Astronomical League membership dues, and update your contact information. For information about accessing this information through Member Planet, send an email to membership[at]tucsonastronomy.org.
- **Meeting refreshments are provided by fellow members.** Be sure to thank them for the goodies. John Christensen coordinates this important aspect of our meetings—contact him if you want to bring refreshments. The TAAA reimburses up to \$25 (receipts not required). Duties can be shared. Contact John at refreshments-coordinator[at]tucsonastronomy.org.
- **Monthly Bulletin** deadlines are the 15th of the preceding month. Email all submissions to taaa-newsletter[at]tucsonastronomy.org



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.

Date/Time	Speaker	Title	Location	Information
Apr 3 Mon 7:00PM	Dr Brian Schmidt Australian National Observatory	<i>The Status of the Universe 2017</i>	Stevie Eller Dance Theater	http://www.as.arizona.edu/public-evening-lecture-series
Apr 17 Mon 7:30PM	Dr. Wen-fai Fong Steward Observatory	Astronomy Tracks Sputnik and Beyond: How Applied Astronomy has Met the Challenges of the Space Age	Steward Observatory Lecture Hall N210	http://www.as.arizona.edu/public-evening-lecture-series