July 2019

Observing our Desert Skies since 1954



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ASSOCIATION

ASTRONOMY

AMATEUR

TUCSON

July 5th General Meeting

Location Change for June General Meeting

Meet in U of A Modern Languages Building, 1423 East University Blvd, Room 350

Introductory Presentation 6:30pm Seasonal Night Sky Objects presented by Mary Turner, PhD Mary Turner, TAAA's appointed Chief Observer, takes us on a tour of the summer night sky. As usual in her popular talks, Mary's use of astronomical data, images, and mythology brings the seasonal changes in the sky to life.

Invited Lecture 7:30pm From Stars to the Laboratory: Stardust in the Solar System presented by Pierre Haenecour , PhD

Inside this Bulletin

CAC Star Party July 5 & 6

TIMPA Star Party July 6 & 26

TAAA BoD Meeting July 10

> AFSIG Meeting July 11

AISIG Meeting July 16

Ladies Night Out July 18 Pierre Haenecour, currently a Postdoctoral research associate, will join the Lunar and Planetary Laboratory in Fall '19 as an Assistant Professor. Pierre holds a B.S. and M.S. degree in Geochemistry from the Free University of Brussels (Belgium, 2010) and obtained a Ph.D. degree in Earth and Planetary Sciences from Washington University (St. Louis, 2016). His research background is in geochemistry and cosmochemistry, with his main focus being the building blocks and early history of the Solar System and the origin of life.

About 4.6 billion years ago, our Solar System formed from the collapse of a large molecular cloud composed of interstellar gas, ice, and dust. Although most of the original dust grains were destroyed during the Solar System's early formation, a small portion remained intact inside asteroids and comets, and can be found today on Earth in some meteorite samples. These tiny pre-solar grains or stardust, formed in the 'envelopes' around stars or in material ejected by certain stellar explosions before the Solar System formed, are the only remnants of its original building blocks. Pierre will talk about pre-solar grains and present a case study on how coordinated laboratory analysis of these specks of dust provide constraints on their parent stars and formation histories.

Gateway To The Galaxy Capital Campaign

As the TAAA fiscal year came to a close in June, the Fundraising Committee has very good news to report on the 'Gateway To The Galaxy' capital campaign. This campaign raised funds for a series of new structures at our Chiricahua Astronomy Complex to enable this dark site to carry on its mission of serving members as an alternative dark site and enhance our ability to hold educational overnight sessions at the site.

The additions to the site include a Learning Center with a large classroom, 3 sleeping rooms, and 2 bathrooms including two fully handicap accessible; another building with 7 sleeping rooms and 2 additional bathrooms; and finally a telescope pad with 4 telescopes permanently mounted nearby. These telescopes are for beginner to intermediate astronomer use. They are typical telescopes one might have at home, such as an 18 inch Dobsonian, a 9.25" and an 11" Celestron SCT and a 12" Meade SCT. The operation of these telescopes can be mastered quickly by members or students.

(Cont. on page 4)

Upcoming Activities

This Month's Events

Key:	TAAA Members Only	For Organization	Public	Events
General Meeting Mae Smith		Jul 5 (Fri) Modern Languages Bldg 1423 E University Blvd		6:30 PM
CAC Star Party Mike McDowell		Jul 5 & 6 (Fri/Sat) CAC 9313 E Perseus Way		Sunset
TIMPA Star Party Dennis McMacken		Jul 6 (Sat) TIMPA 3250 N Reservation Rd		Sunset
Outreach Star Party NW Tucson Jim Knoll		Jul 9 (Tue) Copper Canyon Alzheimer's Care 5901 North La Cholla Blvd		7:30 PM
Outreach Star Party Elfrida AZ Jim Knoll		Jul 9 (Tue) Elfrida Library 10552 N Hwy 191		8:00 PM
Outreach Solar Party Elfrida AZ Jim Knoll		Jul 11 (Thu) Elfrida Library 10552 N Hwy 191		11:30 AM
(Beg	IG Meeting ginners) nor Justice	Jul 11 (Thu) Ward 6 Office 3202 E 1st St		6:30 PM
Cen	each Star Party tral Tucson Knoll	Jul 13 (Sat) Flandrau Science Ce 1601 University Blvd	nter	7:30 PM
AISI Torr	G Rolfsmeyer	Jul 16 (Tue) Total Wine and More 4370 N Oracle Rd		7:00 PM
Ladi Sus	es Night Out an O'Connor	Jul 18 (Thu) Cheddar's Scratch Ki 3455 E Broadway Blv		6:30 PM
	PA Star Party nis McMacken	Jul 26 (Fri) TIMPA 3250 N Reservation I		Sunset
August Member Events				
Aug	Aug 2 (Fri) General Meeting			
A	9 (Thu)	AESIG Monting		

Aug 2 (111)	General meeting
Aug 8 (Thu)	AFSIG Meeting
Aug 13 (Tue)	AISIG Meeting
Aug 14 (Wed)	Board Meeting
Aug 22 (Thu)	Ladies Night Out
Aug 30/31 (Fri/Sat)	CAC

August Outreach Ever		
Aug 9/10 (Fri/Sat)	Spacefest STEAM	



Announcements

- **IMPORTANT NOTICE:** Member Meetings 6:30 and 7:30 July 5th, and August 2nd will be held at the UA Modern Languages Building, 1423 East University Blvd. Third Floor Auditorium (Room 350). The UA Modern Languages Building is located one block West of Steward Observatory.
- The July **Board of Directors Meeting** will be held on Wednesday, July 10th, at 6:30 PM at Banner UMC Hospital, Room C off the hospital cafeteria. 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.
- Immediate need for applicants for two positions: 1. Webmaster or 2. Member Database Manager. To express interest send name, contact information, which position you are interested in, and list of qualifications to NVRCchair@tucsonastronomy.org. Volunteer needed to edit and post video-recordings of Member Meetings.
- Web comments, suggestions or problems, contact our team atwebteam@tucsonastronomy.org.
- Monthly Bulletin deadlines are the 15th of the preceding month. Email all submissions to taaa-newsletter[at]tucsonastronomy.org
- Equipment Loaner program. Contact Ralph Means at elc@tucsonastronomy.org, or 520 460-8770 or bookbuyer1769@gmail.com to check out a telescope, lenses or other equipment. You may try one type or size of telescope, return it, and try another one until you have



Special Interest Group (SIG) Activities

Astro-Imaging SIG (AISIG)

Meeting: Jul 16 (Tue) 7:00 PM

Location: Total Wine and More (4370 N Oracle) Contact: Gregg Ruppel Group email: astro-photo[at]tucsonastronomy.org Leader email: ruppel0709@gmail.com

The July meeting focuses on the Apollo 11 Challenge members are encouraged to try to image the historic landing site and share their results at the July meeting.

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 Gregg Ruppel.

Astronomy Fundamentals SIG (AFSIG)

Meeting: Jul 11 (Thu) 7:00 PM

Ward 6 Office – East Room 3202 East 1st Street (off of Country Club and 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. Ralph Means will start the night with the southern constellation **Telescopium**. For our main topic, Todd Baker will be discussing **Spaceflight History: Apollo 11**.

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.

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.



Starry Messengers SIG-Opening Minds to the Universe

6:30 PM

Meeting: Sep 20 (Mon)

Contact: Terri Lappin Phone: 520-977-1290

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.

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

Jul 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 Mike McDowell. Reservations are on a first come – first serve basis. You need to reserve for both nights if observing both nights.

TIMPA

Jul 6 (Sat) & Jul 26 (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



Potential Contacts This Month: 500 Volunteers Needed This Month: 9

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.

Copper Canyon Alzheimer's Care Star PartyJul 9 (Tue)Set-up: 6:30 PMNW TucsonObserving: 7:00 PM to 8:30 PMLeader: Jim KnollVolunteers Needed: 2Cross Streets: River/La Cholla

We are supporting a star party for Copper Canyon Alzheimer's Care for about 40 senior citizens, Copper Canyon is located at 5901 N La Cholla Blvd. From River go north on La Cholla. Copper Canyon will be on the left (west) side of the street. Setup location is TBD. **Two volunteers with scopes are needed for this event.**

Elfrida Library Star Party				
Jul 9 (Tue)	Set-up: 7:30 PM			
Elfrida AZ	Observing: 8:00 PM to 9:30 PM			
Leader: Jim Knoll	Volunteers Needed: 2			
Cross Streets: Hwy 191/Gleeson Rd				

TAAA is supporting a solar party at the Elfrida Public Library. The library is located at 10552 N Hwy 191. Take I-10 or 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. **Two volunteers with scopes are needed for this event.**

Elfrida Library Solar Party Jul 11 (Thu) Set-up: 10:30 AM Elfrida AZ Observing: 11:30 AM to 12:30 PM Leader: Jim Knoll Volunteers Needed: 1 Cross Streets: Hwy 191/Gleeson Rd

TAAA is supporting a solar party at the Elfrida Public Library. The library is located at 10552 N Hwy 191. Take I-10 or 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. **One volunteer with a solar scope is needed for this event.**

TAAA Outreach Events (Cont)

Flandreau Science Center Moon Viewing July 13 (Sat) Set-up: 7:00 PM Central Tucson Observing: 7:30 PM to 10:00 PM Leader: Jim Knoll Volunteers Needed: 4 Cross Streets: Campbell/Speedway

TAAA is supporting a night of lunar observing at the Flandreau Science Center in commemoration of the 50th anniversary of the Appollo 11 Moon Landing. Go south on Campbell to University Blvd. West on University to observing location or alternatively go south on Cherry from Speedway to the UA Mall. Setup on on the mall south of Flandreau. Four volunteers with scopes are needed for this event

Gateway To The Galaxy Capital Campaign Cont.

Over the past 2 years, the GTTG campaign has reached out for donations to the site to both members and to the community for support of its mission. Do date the campaign has received funds from 24 donors. This includes donations from 21 members in amounts from \$75, to one for \$50,000 and another for \$35,000. In addition, we have had support for our educational mission from three Tucson area foundations with gifts for \$100,000, \$15,000 and \$5,000. The total of funds raised to date stands at \$288,636 as of June 30.

We have solicited bids to build the structures from 5 contractors. Based on those bids it is estimated the cost of the 2 buildings and telescope pad will be \$280,000. The TAAA board has approved moving forward with the project, and has a awarded the contract to a local contractor. We have applied for a building permit targeting an August building start date.

Although TAAA has raised a considerable amount of money for the project, we still need donations to build the enclosures for each telescope, expected to be about \$5000 each, for furniture for the sleeping rooms and to cover the inevitable unexpected building expenses. Anyone who would like to donate to the project can mail their checks to TAAA at PO Box 41254, Tucson, AZ 85717 or give to the campaign online through our web site, or arrange for a pledge with Mike McDowell at treasurer@tucsonastronomy.org.

