### May 2018

Observing our Desert Skies since 1954



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Events Bullet owthuy

# **May 4th General Meeting**

Lunar and Planetary Laboratory Lecture Hall, Room 308, UA Campus, 1629 E University

### Location Change for May General Meeting

Meet in Lunar and Planetary Laboratory (LPL) Lecture Hall, Rm 308, 1629 E University Blvd

Introductory Presentation 6:30pm Seasonal Night Sky Objects presented by Mary Turner, TAAA Chief Observer 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 the seasonal changes in the sky to life.

### Invited Lecture 7:30pm

Gravitational Waves and Things that Go Boom in the Night or The Start Of The Age of Multi-Messenger Astronomy presented by Dr. David Sand , University of Arizona Dr. Sand received his undergraduate degree in Physics from UCLA and his PhD in Physics from Caltech. He is now an Assistant Professor in Astronomy at the University of Arizona, and an observational astrophysicist with many interests. He is particularly interested in time domain astronomy (how astronomical objects change in time), especially in the progenitors of supernova. In his free time, he enjoys the outdoors with his wife Debbie and daughter Delilah.

In his presentation, Dr. Sand talks about the 'time domain' revolution in astronomy, and how we are finding new ways to study stars that merge, burp and explode by looking at their imprints on space-time via gravitational waves. He will highlight recent results on the gravitational wave detection of the merger of two neutron stars, and look to the future of this field. Dr. Sand's interest in things that go bump in the night led to his team's search for electromagnetic counterparts to gravitational waves.and understanding highly volcanic exoplanets in other solar systems.

### Inside this Bulletin

AISIG Meeting May 7

### SIMSIG Meeting May 7 (DATE CHANGE)

AFSIG Meeting May 10

CAC Star Party May 11& 12

TIMPA Star Party May 12 & 18

Ladies Night Out May 17

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### TAAA ELECTIONS

The TAAA elections are this month and in addition to the candidates running for various Board of Director positions there is a ballot initiative as to how members of the Nomination and Volunteer Resource Committee (NVRC) are replaced when a vacancy occurs.

### CANDIDATES FOR BOARD OF DIRECTORS

### Presidential Candidate:

<u>Mae Smith</u>, an only child, grew up in a farm family in rural Mississippi and South Carolina. Her first job was picking cotton at ages 3 and 4. She graduated from Winthrop College with a Bachelor's major in psychology and minors in biology and sociology. From the University of Florida, she obtained a master's degree in educational psychology and a doctorate in counseling and psychology. She has worked as a psychologist, counselor, and/or administrator in a variety of settings and she had a private practice in Tucson as a rehabilitation and counseling psychologist for twelve years.

Mae became a member of TAAA sixteen years ago as a result of her son's love for astronomy, and has a deep appreciation for the Club and the significant, ongoing commitment of TAAA members to sharing their love of the sky. "I intend to be a life-time member of TAAA and enjoy being of assistance to the Club whose members consistently went out of their way for so many years to support my young child's love of astronomy".

### (Continued on page 5)

# This Month in Brief

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

May 3 (Thu) Ventana Elementary Whispering Pines Camp Mt Lemmon Hwy MP 20	7:00 PM
May 3 (Thu) Flandrau Science Center 1601 E University Blvd	7:00 PM
May 4 (Fri) Steward Obs. Rm N210 933 N Cherry Ave	6:30 PM
May 7 (Mon) Total Wine & More 4370 N Oracle Rd	7:00 PM
May 7 (Mon) NEW DATE!! Beyond Bread 3026 N Campbell Ave	7:00 PM
May 9 (Wed) Rio Vista Elementary 1351 E Limberlost Rd	7:00 PM
May 10 (Thu) Fruchthendler Elementary 7470 E Cloud Rd	7:30 PM
	Ventana Elementary Whispering Pines Camp Mt Lemmon Hwy MP 20 May 3 (Thu) Flandrau Science Center 1601 E University Blvd May 4 (Fri) Steward Obs. Rm N210 933 N Cherry Ave May 7 (Mon) Total Wine & More 4370 N Oracle Rd May 7 (Mon) NEW DATE!! Beyond Bread 3026 N Campbell Ave May 9 (Wed) Rio Vista Elementary 1351 E Limberlost Rd May 10 (Thu) Fruchthendler Elementary

Key:	TAAA Members Only	For Organization	Public Events
(Be	SIG Meeting ginners) nnis McMacken	May 10 (Thu) USGS Bldg Room 2 520 N Park Ave	53 7:00 PM
	C Star Party e McDowell	May 11/12 (Fri/Sat) Chiricahua Astronor Complex	ny Sunset
	IPA Star Party nnis McMacken	May 12 (Sat) TIMPA 3250 N Reservation	Sunset Rd
	lies Night Out san O'Connor	May 17 (Thu) Saffron Indian Bistro 7607 N Oracle Rd	6:30 PM
Eas	reach Star Party st Tucson Knoll	May 17 (Thu) Desert Christian Hig 9415 E Wrightstown	
NW	reach Star Party ' Tucson Knoll	May 18 (Fri) Pusch Ridge Christi 9500 N Oracle Rd	an 7:30 PM
	IPA Star Party nnis McMacken	May 18 (Fri) TIMPA 3250 N Reservation	Sunset Rd
NE	olic Star Party Tucson Knoll	May 19 (Sat) Agua Caliente Park 12325 E Roger Rd	7:30 PM

# **Future Events**

Member Events		
Jun 1 (Fri)	General Meeting	
Jun 8 (Sat)	TIMPA Star Party	
Jun 13 (Wed)	Board Meeting	
Jun 14 (Thu)	AFSIG Meeting	
Jun 14 (Thu)	Ladies Night Out	
Jun 15/16 (Fri/Sat)	CAC Star Party	
Jun 15(Fri)	TIMPA Star Party	

Outreach Events		
Jun 9 —16	Grand Canyon Star Party	
Jun 15 (Fri)	Elfrida Library	
Jun 29 (Fri)	Mt Lemmon Whitetail Camping Area	
Jun 30 (Sat)	Sycamore Canyon Park	
Jul 1 (Sun)	Vail Stargazing	



292-5010







Can you count stars? Yes? You can do this!

Help increase the awareness of light pollution by submitting observations all year long.

Current Campaign: May 5 — May 14

Learn more at <a href="http://www.globeatnight.org/">http://www.globeatnight.org/</a>

# **Special Interest Group (SIG) Activities**

### Astro-Imaging SIG (AISIG)

Meeting: May 7 (Mon)

7:00 PM

Location: Total Wine & More (4370 N Oracle Rd) Contact: Jim Heasley Phone: 520-268-8586 Email: astro-photo[at]tucsonastronomy.org

Interested in Astronomical Imaging? Come to the next AISIG Meeting. New and experienced Astrophotographers welcome!! The meeting for May is May 7 (Mon).

### Astronomy Fundamentals SIG (AFSIG)

Meeting: May 10 (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, Email(s): dkmcmacken[at]yahoo.com, elliot.c.justice[at] gmail.com

Come join us for a presentation from the fundamentals of amateur astronomy. Bill Clarke will be discussing Homemade AltAz mounts and Gus Gomez will be showing us the constellation Corvus.

The AFSIG is always 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 and Dennis know, so we can schedule you in. Is there a topic you would like to hear about? Let us know, also.

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. 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 fee to park in the Sixth Street parking garage to the east. The meeting room is on the second floor; use the stairway in the central courtyard. An elevator is available on request. Contact Dennis McMacken using email above if you require access to the elevator.



Starry Messengers SIG-Opening Minds to the Universe

6:30PM

Next Meeting: May 7 (Mon) Beyond Bread (3026 N Campbell Ave) Contact: Terri Lappin Phone: 520-977-1290 Email: smsig@tucsonastronomy.org

Interested in spreading the fun of astronomy? Volunteer as an Astronomy Guide. Training is available and you'll be partnered with a seasoned Astronomy Guide at the event. For information or to help these events, contact Terri Lappin.

### **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

### May 11 & 12 (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

#### May 12 & 18 (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 school-sp-Jim at volunteers@tucsonastronomy.org or 520-241-3113. lf 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: 650 Volunteers Needed This Month: 21

#### Ventana Elementary School Star Party @ Girl Scouts Whispering Pines Camp May 3 (Thu) Set-up: 6:30 PM NE Tucson Observing: 7:00 PM to 9:00 PM Leader: Jim Knoll Volunteers Needed: 3 Cross Streets: Mt Lemmon Hwy/Milepost 20

Ventana Elementary School is having a star party for 100 students at the Girl Scouts Whispering Pines Camp. The camp is located at Organization Ridge Rd and milepost 20 of Mt Lemmon Hwy. **One more volunteer with scope is needed for this event.** 

Intermountain Center @ Flandrau Star Party (Educational & Therapeutic Support) May 3 (Thu) Set-up: 6:30 PM Central Tucson Observing: 7:30 PM to 9:00 PM Leader: Jim Knoll Volunteers Needed: 3 Cross Streets: Speedway/Cherry

The Intermountain Center is having a star party for 100 people at the Flandrau Planetarium. The Planetarium is located three blocks south of Speedway. The viewing location is on the UA Mall south of Flandrau. **No more volunteers are needed for this event.** 

### Rio Vista Elementary School Star Party

May 9 (Wed) North Central Tucson Leader: Jim Knoll Set-up: 6:45 PM Observing: 7:30 PM to 8:30 PM Volunteers Needed: 3

### Cross Streets: Campbell/Limberlost

Rio Vista Elementary School is having a star party for 300 people. The School is located at 1351 E Limberlost Rd. Go west on Limberlost the school is on the north side. The viewing location is on the north playground (gate access off Prospect Ln). Four volunteers with scopes are needed for this event.

#### Fruchthtendler Elementary School Star Party May 10 (Thu) Set-up: 7:00 PM East Tucson Observing: 7:30 PM to 9:00 PM Leader: Jim Knoll Volunteers Needed: 2 Cross Streets: Sabino Canyon/Cloud

Fruchthtendler Elementary School is having a star party for 45 3rd grade students. The School is located at 7470 E Cloud Rd. Go east on Cloud from Sabino Canyon, the school is located on the south side. The viewing location is on the basketball court. **Two volunteers with scopes are needed for this event.** 

# TAAA Outreach Events (Cont.)

Desert Christian High School Star Party @ K-8 Campus May 17 (Thu) Set-up: 7:00 PM

East Tucson Obse Leader: Jim Knoll Cross Streets: Speedway/Harrison

Observing: 7:30 PM to 9:00 PM Volunteers Needed: 4

Desert Christian High School is having a star party for 45 students at the K-8 campus. The School is located at 9415 E Wrightstown Rd. Go north on Harrison from Speedway, the school is located at the curve where Harrison turns into Wrightstown on the north side. The viewing location is on the basketball court. **Four volunteers** 

Pusch Ridge Christian Academy High School Star Party		
May 18 (Fri)	Set-up: 7:00 PM	
NW Tucson (Oro Valley)	Observing: 7:30 PM to 9:30 PM	
Leader: Jim Knoll	Volunteers Needed: 4	
Cross Streets: Oracle/Calle Concordia		

Pusch Ridge Christian High School is having a star party for 45 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. **Four volunteers with scopes are needed for this event.** 

Agua Caliente Park Public Star Party		
May 19 (Sat)	Set-up: 7:00 PM	
NE Tucson	Observing: 7:30 PM to 9:30 PM	
Leader: Jim Knoll	Volunteers Needed: 4	
<b>Cross Streets: Roger/Soldier</b>	Trail	

We are supporting a public star party at Aqua Caliente Park. 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. **Four volunteers with scopes are needed for this event.** 

### Announcements

- The February **Board of Directors Meeting** will be held on May 9th at 6:30 PM in the UMC Cafeteria, Rm 2500F (1500 N Campbell Ave).
- 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. <u>We need volunteers for calendar year</u> <u>2018. A signup sheet will be at the meeting.</u> 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

### Vice Presidential Candidate:

John Mead, became interested in astronomy as a teenager and was active in mirror making and telescope design. During a career in government and academia (as a lawyer and administrator) he stayed current in amateur astronomy, but was not active in any club. That all changed about ten years ago when he joined a local astronomy association and realized how much he was missing!

In 2013 (following retirement) he and his wife moved to Tucson from Illinois and soon joined TAAA. He is a member of the Strategic Planning Group and has also been serving as an instructor for the C-14 observatory at CAC. In addition to his interest in astronomy, he is a long-time volunteer in the Boy Scouts and is currently serving as a District Chair in the Catalina Council, BSA.

### TAAA Secretarial Candidate:

<u>Chuck Hendricks</u>, has been a member of TAAA since 2010 and is actively involved in TAAA's community outreach programs through school star parties. Chuck was elected to the TAAA Board of Directors in 2012 and currently serves as Secretary.

After nearly twenty-five years, Chuck retired from Raytheon Missile Systems where he had served as a Principle Configuration Analyst on several programs. Chuck served for 26-years in the U.S. Air Force, ending his career as a Technical Manuals Development Manager responsible for depot level overhaul and maintenance manuals for Intercontinental Ballistic Missile motors. Chuck resides on Tucson's East Side with his wife Chong (Sammi), formerly of South Korea.

#### **TAAA Treasurer Candidates:**

<u>Charles Coffey</u>, Was born in Montgomery, Alabama. Raised in Smyrna, Tennessee and has lived in Guam, Okinawa, American Samoa, and the Navajo Nation. He is retired college faculty.

He built first telescope from books in high school. This was a 6-inch, f/8 with a hand ground mirror and a handmolded fiberglass tube on a water pipe equatorial mount. He worked for NASA during the Apollo program as a cooperative engineering student in an optics lab at the George C. Marshall Spaceflight Center in Huntsville. He has a MBA with an emphasis in Computer Information Systems. He has taught in the business division at Diné College on the Navajo Nation for twenty-two years. Possesses strong computer skills.

<u>Mike McDowell</u>, His interest in astronomy began during elementary school in Elgin, Illinois. He ground and polished his first telescope mirror when he was 11, which he built into his first telescope, a 6 inch f10. He was an active member of the Elgin Astronomical Society throughout my school years until I left for college.

He and his wife moved to Tucson in the fall of 2016 in large part to allow me to continue my interest in astronomy after more than 40 years in the cloudy Pacific Northwest. He joined TAAA immediately upon our arrival. He became involved with the CAC Strategic Planning Group in the fall of 2017 and became the CAC Director in January 2018. In addition to his interest in astronomy, he brings a background of more than 30 years as a small business owner and manager to share with TAAA.

### TAAA Member-at-Large Candidates:

**Ed Foley**, has been interested in astronomy for more than 50 years, but living for the last 30 years in urban settings was limited in his ability to pursue his love of the science. Soon after coming to Tucson, he joined TAAA and in 2014 was elected Treasurer. In the position of Treasurer, he put in place many new processes and procedures. He previously worked 35 years in finance and marketing in 3 countries.

**Rob Hallberg**, grew up in Falls Church, VA, a suburb of DC and enjoyed a 30-year career in large system software sales to Fortune 500 companies, which resulted in relocating to Tampa, Miami and finally Dallas. Thirteen years ago he and his wife Catherine moved to Tucson. He currently devotes quite a bit of his time to service in the Tucson Association of Realtors. He has been on the Board of Directors for the past two years and is currently serving as Vice President. "I believe my experience on the TAR Board of Directors would be helpful in serving on the TAAA Board. I want to become more involved in TAAA and I see this as a starting point for service in other areas as my real estate responsibilities lessen".

<u>Shawn Hermann</u>, was born and raised in Phoenix, Arizona and graduated from NAU with a double major in Physics and Astronomy. His work experience includes: Collaboration with Dr. Wes Lockwood on the Sun cycles and Dr. Ted Bowell on the LONEOS (Lowell Observatory Near-Earth Object Search) project. He has discovered hundreds of main belt asteroids but is most recognized for: 1999HF1 Aten asteroid +3km diameter, Comet Hermann, and asteroid (10239)Hermann. After Lowell Observatory, He worked at Raytheon as an Optical Electric Engineer. He is now retired and hopes to inspire others to love Astronomy as he does!

**<u>Richard Loper</u>**, has always had a strong interest in astronomy but wasn't very active in it due to school and career demands. That changed when he moved to the Denver area in 1997 and then joined the Denver Astronomical Society. He started attending local star parties and then volunteered for the telescope operator program at Chamberlin Observatory. The Observatory is mostly dedicated to public outreach. He moved to the Tucson area last May and started in on TAAA's public outreach events. His interests are in visual observing and eventually astrophotography.

**Doug Smith**, has been into Astronomy for most of his life. He started when he was 5 with a 3 inch Tasco refractor. And has been into Amateur Astronomy ever since. More than 50 years. He is currently the ALCOR for TAAA which is the second time at that position. He has his AL Master Observing Award and has several undergraduate and graduate degrees, including an MS in Physics. He is currently an engineer at Raytheon with 37+ years' experience.

**<u>Bill Wheeler</u>**, is a retired real estate broker from Northern California and moved to Green Valley in August of 2014 and promptly joined TAAA. He has a lifelong interest in astronomy and telescope making and built his first telescope in high school while growing up in Kentucky. He moved to California in 1963 and joined the Riverside Astronomical Society. He moved to Northern California where he was active in the Sonoma County Astronomical Society and Robert Ferguson Observatory. He is certified on the C-14 at CAC, and looks forward to being certified on the 40 inch Reynolds. He is currently working on building a 16 inch Harmer-Wynn astrograph.

### **TAAA NVRC Candidates:**

Ken Bertschy

### Dale Nichols

David Rossetter