

Meeting Minutes 8/31/18

- **Introductions!**

- Mackenzie - President
- Ryan - VP
- Collin - Historian
- Emily - Outreach Coordinator
- Jimmy - Treasurer
- Madison - Secretary
- Sammie - Tech Officer
- Dr. Yancy Shirley - Faculty Advisor
- Dr. Don McCarthy - Astro Club Guest Speaker

- **What does Astro Club do?**

- Astro Club is a mix between a social club and an outreach club. We do star parties, we have astronomy question of the day/astronomy news of the week, ATOMM/TIMESTEP. We do activities such as the club picnic, movie/game nights, pumpkin carving, and telescope training. We also do research related activities such as AAS, the internal symposium, and we travel to observatories such as LBT and Kitt Peak. And of course, every spring semester we take a club trip!

- **ATOMM:** Astronomy Tutoring of Majors and Minors. A tutoring service where upperclassmen/grad students provide help for you astronomy/physics/math classes! This takes place everyday in the Parker Library (across from N305) from 2-4pm. Be sure to come if you need help with these subjects, want to study with friends, or meet people in your major!

- **TIMESTEP:** TIMESTEP is a discussion group about topics of professional development for undergraduates in STEM fields at U. Arizona with a specific focus on supporting students who are underrepresented minorities (URMs). The next meeting will be held on September 12th in PAS 218. The topic discussed will be Navigating the First Two Years of Physics/Astronomy. There will be pizza!!
 - In addition, we will hear from STEM undergrads about their Tech Industry internships they did as a part of TIMESTEP at the next Astro Club meeting (September 7th)!

- **Grad/Undergrad Mentor Program:** Juniors/Seniors in the astronomy major can get one on one help with applying to grad school, advice on how to navigate grad school, etc. Please let Astronomy Club officers know if you're interested!
- **Don's Question of the Week:**
 - Each question is a fun/new way to perceive the world around us!
 - Rainbows! Mackenzie's picture: What time of day was this taken? Which direction was she facing?



Pic was taken later in the day, she was facing south, sun was setting in the west, shadows are facing east. It was taken at the desert museum, ~ 5 minutes before a monsoon. Now what about Sammie's picture?



It was taken at 7:30pm, so she was facing east

- Similarities/Differences? Which pic has more blue? Which has more red? Why?
- Primary bow ~ 40 degrees down sun, Dark sky ~ light cannot come through a raindrop to the observer, Secondary bow ~ light does a "double bounce" it is reflected and refracted

- (http://spaceweathergallery.com/indiv_upload.php?upload_id=147573)
Another type of rainbow? A reflection rainbow, source of light is not the sun, but rather the reflection of the sun from a nearby body of water
 - “In the news” discussion group? Last semester we discussed missing dark matter in a galaxy and a new type of meteorite. Need help choosing topics, if you’re interested, let us/Don know!
- **Astronomy News of the Week:** Presented by Collin Lewin! OSIRIS-REX begins approach operations!
<https://www.asteroidmission.org/?latest-news=nasas-osiris-rex-begins-asteroid-operations-campaign> Get hype! It will get to Bennu on December 3rd!
 - Be sure to sign up for astro news of the week! It’s super fun and we like to know space news!
 - **SOFIA:** Presented by Yancy! Yancy went to US Antarctic Center in New Zealand to fly in SOFIA! (<https://youtu.be/hxl9zASobtU>) SOFIA is a 747 with an optical telescope in it! People can observe above the atmosphere at 40,000 ft! Yancy had the opportunity to sit in the cockpit and watch SOFIA take off!
 - **Club Picnic!** Will take place on Saturday Sept. 29th at Windy Point on Mt. Lemmon. We will have our picnic and then do some stargazing! Please bring some food to share (nothing that is messy or needs to be frozen) or a \$5 food donation. We’ll be leaving from the Steward parking lot at 4pm.
 - **Club Fair!** The club fair is on September 6th from 9am - 2pm on the UA Mall. We’ll have our telescopes out to do some solar observing, and we definitely need some volunteers so if you have time you can spare please sign up!
 - **Telescope Training/Movie Night:** On September 14th we’ll watch a movie right after club meeting. A poll will be sent out to vote for which movie we watch. Also, there will be free pizza! Come hang out! In addition, telescope training will take place on the mall afterwards (~7:30pm). It is highly recommended that members do this so you’ll know how to run the telescopes for star parties!
 - **Star Parties and how to do them:** We will send out a sign up sheet for them about a week in advance, basically we go to schools and talk to them about space stuff! We bring telescopes and we also do creative activities such as planet painting and crater making! Please volunteer when you can! Those who volunteer to drive will be reimbursed for gas.

- **Active Galactic Videos:** AGV is a student-run education group under Dr. Chris Impey and Dr. Matthew Wenger. They have a Youtube channel! <https://youtu.be/SjQM2wjlww> and they are looking for people who want to promote astronomy in videos! Talk to Sammie if you're interested!
- **Telescope Observing at Steward:** We have an actual observatory believe it or not! And you can come observe with it! Steward has a 21" telescope that will be open to observers starting September 17th! It will run Mondays-Thursdays from 7:30-10:30pm! Come look at stars, galaxies, nebula, and more!
- **Astronomers:** Hey buddy,,,,,,wanna get some snacks? There's an unofficial Astro club snack store on 3rd floor outside Parker on bookshelf. It's restocked every week. And it's open to everyone, including faculty. Honor system payment.
- **Pay your dues!** \$10 each semester, funds for trips, snacks, cool activities, shirts, etc. Due it.

