

**FRIENDS OF TAYLOR OBSERVATORY –  
NORTON PLANETARIUM  
Board of Directors**

**Taylor Observatory Classroom  
5725 Oak Hills Ln, Kelseyville, CA 95451**

**MEETING AGENDA – Thursday, November 10, 2022, 5:15 PM**

**CALL TO ORDER [Tim]**

**INTRODUCTION OF VISITORS [Tim]**

**AGENDA APPROVAL [All]**

**MINUTES [Barbara]**

**SPECIAL RECOGNITION [Tim]**

**FINANCIAL REPORT [David M.]**

**BUSINESS ITEMS**

- 1) President's Report (Tim)
  - a. FOTO Bylaws
  
- 2) FOTO Window to the Universe Events and other special events (All)
  - a. Phil Scherrer has volunteered to speak on solar issues
  - b. Potential speaker: Jessica Ball, USGS California Volcano Observatory
  - c. Prof Stephen Kane, UC Riverside, who spoke to us twice on exoplanets. Prof Kane has added the planet Venus to his research interests and has been a player in convincing NASA to re-start a program involving Venus.
  
- 3) Discussion: Are we meeting the appropriate level of education and enjoyment for the majority of people in Lake County (Barbara)
  
- 4) LCOE/Lake County Schools Update (Jennifer, Angelo, and Eduardo)
  - a. Please see Attachment A for a report from Jennifer Kelly
  
- 5) Press Democrat Article (Eduardo)
  - a. Please see Attachment B for correspondence between Eduardo and Kathleen Scavone at the Press Democrat.
  
- 6) Telescope Maintenance issues (Haddon, McKeown)
  - a. Missing controller for the Atlas mount (for Optical Craftsman planetary scope)
  - b. Broken button on hand controller for the Teeter Dob.
  
- 7) Solar diffraction grating project for students -- proposed by Debra Scherrer. (Haddon)

**OTHER NEW BUSINESS**

**ADJOURN**

(Attachment A) 11.10.22 Board meeting info from LCOE Taylor Observatory, Planetarium & STEAM Center:

- The new projector in the planetarium is up and running! YAY! Angelo can give you the details of its quality differences from the old projector. Angelo, will you add that info please? Also, info about the work you have done cataloging the available videos.
- There have been sewer issues from one of the trees growing roots into a pipe right in front of the building. The tree and bushes in that area are being removed. We are considering landscaping for that area and are open to suggestions. Rock garden (to show off rocks from different areas? Bird bath? Model of Mars or moon landscape?
- We are having issues with the augmented reality sand table computer downloads and at this point, the sand table is not available for field trips.
- Field trips and outreach to schools are being booked and we get busier with the passing of each month!
- We have a new exciting high school outreach in the works, which involves engineers visiting the classroom to teach Arduino Robotics Class. This Taylor outreach is in collaboration with Reynolds Systems, Inc. A flier will be provided at the next board meeting.
- The parking lot solar system measured out and painted by Angelo, has been a big hit on field trips!

Thanks,  
Jennifer

(Attachment B)

**1. Did the planetarium projector get repaired?**

The planetarium is now operational. It has been upgraded to have a new projector, planetarium software, and a new sound system. The planetarium now projects in full HD, has full surround sound, and a planetarium software that allows us to explore the Earth and the Solar System like never before. The planetarium will be a brand new experience.

**2. What are all of the duties you fulfill at Taylor? Do you give some classes in Spanish? Have you always been bilingual?**

My main duty as an Observatory Assistant was to support the Observatory Coordinator/STEAM Specialist in whatever direction they believed Taylor should go. I worked with six coordinators/specialists over the past ten years to expand what Taylor had to offer. It was a wonderful experience to work with such a variety of people with different skills and knowledge. Our observatory went from offering mostly field trips surrounding astronomy to field trips surrounding STEAM education and outreach to schools. I mostly ran the planetarium or outdoor activities during field trips. My favorite memories have been running the planetarium during CMAS's 5th grade Science Day. Giving an interactive tour of the night sky to a large percentage of fifth graders in the county where they could let their curiosity guide their experience felt great. My greatest contribution to Taylor has been the increased variety of planetarium shows, expansion of the robotics program, and maintaining a form of continuity between transitions between coordinators/specialists. Planetarium shows are one of the most expensive things that Taylor can buy. Each planetarium show can cost between \$5,000 and \$10,000. I searched for

planetarium shows that were free or inexpensive and converted them to a format our planetarium could run. I also adapted the planetarium projector to be able to show the planetarium shows that we can rent for \$30 a week. During my time at Taylor, I worked on running robotics classes for students and teachers. In 2020, Taylor budgeted money for expanding robotics, and I looked at increasing robotics in elementary schools. This came at the perfect time since the pandemic prevented field trips and only allowed for school outreach. I visited dozens of classes throughout the county and gave students a taste of robotics. My other contribution would be my knowledge of what each of the coordinators or specialists has done so that the next person can expand on their knowledge.

My work in attempting to encourage more Spanish events has been one of my biggest failures at Taylor. Every time I have attempted these events, I have usually had no one show up or at most five people. I was never able to do great advertising in the Latino community.

**3. Talk about your background at Taylor and how long you have been working and/ or volunteering there (Were you a paid employee of LCOE?) IE, what got you started, etc.**

I became involved at Taylor in 2011, when I won a telescope through the Friends of Taylor Observatory's Future Astronomer program. The members of the Friends of Taylor Observatory were and continue to be excellent mentors, and I am very thankful for everything they have taught me. Barbara McIntyre, the observatory coordinator at the time, suggested that I participate in the high school volunteer program and volunteer at the observatory. She taught me so much about the planetarium, the field trips, and robotics, and many of the programs that she started would get expanded upon and improved over the years. This would eventually lead to a paid job through the Lake County Office of Education as an observatory assistant in 2013. In 2015, I joined the Friends of Taylor Observatory as a board member. In September 2022, I transferred to UC Davis to complete my BS in Geology, and I had to leave my position as observatory assistant. I am currently still involved at Taylor through the Friends of Taylor Observatory.

**3A. Do you still interact with students at Taylor and teach robotics?**

My last time I interacted with students was in September when I did outreach to a middle school STEM class with robotics. Currently I am mostly working on finishing an Earth Science display to go along with the augmented reality sandbox table that we use to teach students about the water cycle and California's geography. If I am not doing summer field work I am open to helping out at Taylor as a volunteer.

**4. Will the 'under the dome' telescope be in use soon for events to the public?**

FOTO and LCOE are planning on replacing the 16-inch telescope that is currently under the dome. The telescope will be replaced with one much better suited for astrophotography and more useful for research. The goal would be to have the telescope under the dome be capable of capturing long-exposure photographs to display them in the classroom at Taylor or at one of the schools in the county. This way,

we can offer Lake County high school and community college students the chance to attempt sky survey research similar to the ones used to find comets and asteroids. We are not getting rid of the thrill and memory of looking through a large telescope at objects. We will have our 18-inch telescope, as well as a variety of other telescopes, available to view our public events.

**5. Would you care to share anything else about your background? How long have you lived in Lake County, etc, or anything else?**

My parents immigrated to the United States from Mexico in order to seek a better life. My parents have limited education, and only my father is able to speak and read English. Both of my parents have worked in the pear sheds, and my father has been a vineyard field worker for over 30 years in Lake County. My father has had a great impact on my life by teaching me the value of hard work and education. My father had to drop out of elementary school and go to work taking care of livestock. Even though he had no formal education, my father tried to read whenever he could and liked to learn about all kinds of stuff. Growing up, my father would encourage my sister and me to read as much as possible. He would take us to the Lakeport library and encourage us to check out as many books as possible. This helped me learn as much as possible from books. I grew up and lived in Kelseyville for most of my life, except for a few years in Mexico. That experience allowed me to go to school in Mexico and learn how to read and write in Spanish.

**6. Is your title VP of Communications and are you also a board member? How do you prepare for lectures?**

I am currently the Vice President of Communications for FOTO. I am in charge of managing the email newsletter, event advertisements, and the social media pages. My primary responsibilities at FOTO have been event and technical support. During the Window to the Universe events, I will usually run the planetarium or one of the telescopes. The most memorable experience for me would be running our 2017 solar eclipse event. We had hundreds of people show up, including students from the local school.

I usually choose topics I am familiar with. I love topics involving space exploration and the solar system. I try to learn as much as possible about the topic by writing down notes and practicing my talk.