

Meeting Minutes 12/4/2020

- General Club Announcements
 - ATOMM
 - Tutoring for physics, astronomy, and math by experienced graduate students (over Zoom!)
 - M (2-4 pm) Yujing Qin
 - T (noon - 2 pm) Ryan Keenan
 - W (1-2 pm) Ryan
 - Th (2-3 pm) Yujing
 - Game Night tonight after the meeting!
- TIMESTEP
 - Next Meeting: Wednesday, December 9th at 5 pm over Zoom
 - Topic: Undergraduate Research Opportunities
 - Led by Carlos Vargas
 - Register at <https://lavinia.as.arizona.edu/~timestep/> for Zoom link
- Officer Elections!
 - Candidates
 - President
 - David Cantillo
 - Vice President
 - Sai Krishanth Pulikesi Mannan
 - Treasurer
 - Harrison Bradley
 - Outreach Coordinator
 - Kayli Marie Glidic
 - Secretary
 - Binh Nguyen
 - Zach Werber
 - Historian
 - Sarah Stamer
 - Aidan Nakhleh
 - Tech Officer
 - Hannah Martuscello
 - Equipment Manager
 - Wyatt Ellis
 - Quorum met (at least 31 students)
 - Voting takes place from now to the YancyKahoot
 - Use the GoogleForm and login to vote only once
 - Positions without incumbents:
 - Secretary
 - Historian
 - Equipment Manager
- What Up Astronomy Club with Yancy

- Jupiter and Saturn are getting closer and closer together!
- December 21st, the two planets will be only a 10th of a degree from each other
- Venus is heading back to the horizon in the morning sky
- Moon is a thin crescent
- Geminids Meteor Shower in the direction of Castor and Pollux in the constellation Gemini
- Astronomy Question of the Week with Don
 - Jupiter and Saturn are very close together
 - Will you be able to see them as separate objects in the sky?
 - 1226 was the last time these planets were so close together
 - Dark adapted eyes should be able to differentiate them
 - Tomorrow night at 8:43pm, Algol will be eclipsing. 10 to 8 hours later the eclipse will end. Pretty cool!
- Astro News of the Week with Savannah
 - Arceibo's platform collapsed :(
 - In happier news...
 - Gaia revealed new data!
 - WTF is this? Space ORCs (Odd Radio Circles)!
 - <https://theconversation.com/wtf-newly-discovered-ghostly-circles-in-the-sky-cant-be-explained-by-current-theories-and-astronomers-are-excited-142812>
- Timeless Telescopes with Harrison
 - Icecube Neutrino Observatory
 - South Pole, Antarctica
 - Primary: UWisconsin-Madison
 - Construction 2005-2010
 - Setup
 - 86 strings, 50 detectors on each in an array ~2500m below the ice shelf
 - Photomultiplier tubes detect cherenkov radiation from charge leptons emitted from neutrinos interacting with water molecules
 - Info is digitized, used to calculate trajectory, point of origin
 - Can detect neutrinos $\sim 10^{11}$ to 10^{21} eV, very high energy particles
 - Also used to detect cosmic rays
 - Science
 - Neutrino astronomy and multi-messenger astronomy
 - GW event collaboration
 - Cosmic ray physics
 - Ice Top
 - Neutrino physics
 - Search for sterile neutrinos
 - Dark matter
 - Neutrinos from dark matter annihilation
 - Neutralino WIMP (weakly interacting massive particles)
 - Glaciology
 - Dust detection in ice sheet

- YancyKahoot - votes ended at 4:46pm AZ
- Club Slideshow
- Election Results
 - President: David Cantillo
 - Vice President: Sai Krishanth Pulikesi Mannan
 - Treasurer: Harrison Bradley
 - Outreach Coordinator: Kayli Marie Glidic
 - Secretary: Zach Werber (14 votes for Zach vs 12 for Binh)
 - Historian: Aidan Nakhleh (14 votes for Aidan vs 12 for Sarah)
 - Tech Officer: Hannah Martuscello
 - Equipment Manager: Wyatt Ellis
- Game Night!