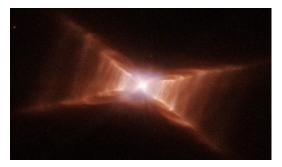
Meeting Minutes 10/19/18

- 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:** The next meeting will be held on October 24th in PAS 218 at 5pm. The topic discussed will be applying to graduate school! Hear from a panel of faculty and staff about what's involved in applying for graduate school and how to set yourself up to be competitive. There will be pizza!!

Don's Question of the Week:

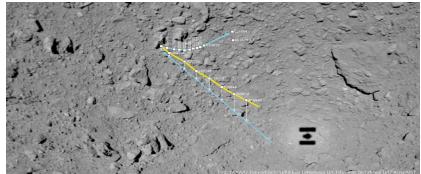
• What kind of "nebulae" are these?





The one on the right is actually a rocket launch! The one on the left is called the Red Rectangle, which is a planetary nebula!

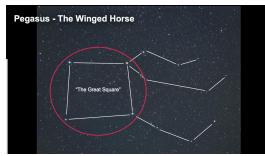
When are the longest and shortest days of the year? The longest day is in December, the shortest in mid-September, where a day is defined as "one noon to the next noon" by Don. Why is that? Because of the Earth's motion around the Sun, when it is closest to the Sun it has to make slightly more than one turn to line up with the Sun. -> http://earthsky.org/tonight/longest-days-of-year-accompany-the-december-solstice Asteroid Ryugu -> "heiligenschein" October 3, 2018



We can see

the solar panels of the probe. Does the space probe's orientation make sense? Yes, because it's solar panels should be perpendicular to the Sun! Fun Fact: Ryugu is the most populated asteroid, it has 3 man-made space objects on it. Check out news about the landing -> https://www.foxnews.com/science/crazy-rocky-surface-of-asteroid-ryugu-revealed-in-mascot-lander-image

- Astronomy News of the Week: Presented by Emily Walla! It's the 10th anniversary of the FERMI mission! FERMI searches for gamma ray emissions in the sky! For the anniversary, 21 new constellations were made! However, they are not made from stars! They're made from gamma ray bursts! Here's the link: https://phys.org/news/2018-10-nasa-fermi-mission-energizes-sky.html
 Be sure to sign up for astro news of the week! It's super fun and we like to know space news!
- Constellations of the Week: Presented by Sammie Mackie! This week is
 Pegasus! Here's the mythology behind it ->
 https://www.heavens-above.com/myth.aspx?con=peg&lat=0&lng=0&loc=Unspecified&alt=0&tz=UCT&cul=en Check out in-the-sky.org if you want to use a planetarium on your computer!





- Star Parties: There will be an internal Star Party at Kitt Peak on Saturday November 3rd, sunset will be ~ 5:30pm. And we have another one on November 13th at Whitmore Elementary School from 6-8pm, we will be sending out the sign up sheet for this one soon! There will be telescopes and other activities!
- Pumpkin Carving: Will be on October 26th after the club meeting! We'll carve pumpkins on the grass outside of Steward Observatory! Sign up sheet is out now and will be closing the Wednesday before the event!
- **Spring Fling Committee:** We need 4-5 people to help us with Astro Club's involvement in Spring Fling. It will be a large time commitment, but it will be good experience for you if you're interested in club officer positions! Email Mackenzie or Ryan if you're interested!
- **Astronoms:** Hey buddy,,,,,,wanna get some snacks? There's an unofficial Astro club snack store on 3rd floor outside Parker on bookshelf on the opposite side from the elevator and bathrooms. It's restocked every week. And it's open to everyone, including faculty. Honor system payment.
- **T-shirts!:** Coming soon! Please indicate your size on the sheet! We will not be getting shirts for those who do not have their sizes on there!
- Astronomy Club Officer Elections: If you are interested in any position, make sure to come to the next meeting! The officers will talk about the work that their positions entail! Elections will be held November 16th and applications will be due the week before.
- Pay yo dues! \$10 each semester, funds for trips, snacks, cool activities, shirts, etc.

