#### Cosmology/Astrophysics News

Maat Mons volcano on Venus

March 2023 for Rose City Astronomers SIG

### Nature – March 2, 2023

- Bright black holes and neutron stars beat alike
  - <u>https://www.nature.com/articles/d41586-023-00532-0</u>
- A shared accretion instability for black holes and neutron stars
  - <u>https://www.nature.com/articles/s41586-022-05648-3</u>

#### Science – March 3, 2023

• No cosmology/astrophysics news this issue

### Nature – March 9, 2023

- Secrets in the dust: Signs the Sun had many siblings
  - https://www.nature.com/articles/d41586-023-00569-1
  - https://www.aanda.org/articles/aa/abs/2023/02/aa44743-22/aa44743-22.html
- Asteroid lost 1 million kilograms after spacecraft collision
  - <u>https://www.nature.com/articles/d41586-023-00601-4</u>
- Deuterium-enriched water ties planet-forming disks to comets and protostars
  - https://www.nature.com/articles/s41586-022-05676-z

# Science – March 10, 2023

- Satellite swarms spoil Hubble's view
  - <u>https://www.space.com/hubble-images-spoiled-starlink-satellite-steaks</u>
  - <u>https://doi.org/jzhk</u>

## Nature – March 16, 2023

• No cosmology/astrophysics this issue

#### Science – March 17, 2023

• No cosmology/astrophysics this issue

# Nature – March 23, 2023

- Star turn? Distant planet has traits of brown dwarf
  - https://www.aanda.org/articles/aa/full html/2023/03/aa44238-22/aa44238-22.html
- Volcanoes on Venus? "Striking" finding hints at modern activity
  - <u>https://www.nature.com/articles/d41586-023-00783-x</u>
- Black holes up close
  - <u>https://www.nature.com/articles/s41586-023-05768-4</u>
- A helium-burning white dwarf binary as a supersoft X-ray source
  - <u>https://www.nature.com/articles/s41586-023-05714-4</u>
- Acceleration of 1I/'Oumuamua from radiolytically produced H2 in H2O ice
  - https://www.nature.com/articles/s41586-022-05687-w

# Science – March 24, 2023

- Earth at higher risk of big asteroid strike, satellite data suggest
  - <u>https://www.science.org/content/article/earth-higher-risk-big-asteroid-strike-satellite-data-suggest</u>
- Surface changes observed on a Venusian volcano during the Magellan mission
  - <u>https://www.science.org/doi/10.1126/science.abm7735</u>

# Nature – March 30, 2023

- A gem of a material could provide a shield for spacecraft
  - https://www.nature.com/articles/d41586-023-00834-3
- A glimpse at the inner structure of the proton
  - <u>https://www.nature.com/articles/d41586-023-00836-1</u>
  - <u>https://www.nature.com/articles/s41586-023-05730-4</u>
- A massive core for a cluster of galaxies at a redshift of 4.3
  - <u>https://www.nature.com/articles/s41586-023-05761-x</u>

# Science – March 31, 2023

- Earliest galaxies challenge ideas about star birth in infant universe
  - https://www.science.org/content/article/earliest-galaxies-challenge-ideas-about-star-birth-infant-universe
- Streams of cold cosmic fuel for galaxies
  - <u>https://www.science.org/doi/10.1126/science.adh1663</u>
- A cosmic stream of atomic carbon gas connected to a massive radio galaxy at redshift 3.8
  - <u>https://www.science.org/doi/10.1126/science.abh2150</u>

# Miscellaneous

- Next in-person meeting will be when pandemic is over. Please stay safe!
- In the meantime, I will post this monthly news possibly with zero or more videos and links to watch, as for example, these:
  - <u>https://youtu.be/uZtHLmkGy6w</u>
  - <u>https://www.youtube.com/watch?v=tP2Yghf7Jcw</u>
  - <u>https://www.youtube.com/watch?v=EGe5qvIzjTY</u>
  - <u>https://www.youtube.com/watch?v=SR4BM7PANMw</u>
  - <u>https://www.youtube.com/watch?v=uc0HplapmJY</u>