

# Cosmology/Astrophysics News

Black hole's  
polarized light



April 2021 for Rose City Astronomers SIG

<http://101iq.com/RCA>

# Science – March 26, 2021

- Remains of Moon-forming impact may lie deep in Earth
  - <https://science.sciencemag.org/content/371/6536/1295>
- Lens array captures dim objects missed by giant telescopes
  - <https://science.sciencemag.org/content/371/6536/1301>

# Nature – April 1, 2021

- Long-awaited muon physics experiment nears moment of truth – might upend fundamental physics
  - <https://www.nature.com/articles/d41586-021-00833-2>
- Antimatter hydrogen cooled by laser light
  - <https://www.nature.com/articles/d41586-021-00786-6>
  - <https://www.nature.com/articles/s41586-021-03289-6>

# Science – April 2, 2021

- Polarized light view of black hole
  - <https://scitechdaily.com/astromers-polarized-image-shows-magnetic-fields-at-the-edge-of-m87s-black-hole/>
- Underwater neutrino traps take shape
  - <https://science.sciencemag.org/content/372/6537/15>
- Hydrated crust stores Mars' missing water
  - <https://science.sciencemag.org/content/372/6537/27>

# Nature – April 8, 2021

- No cosmology/astrophysics news this issue

# Science – April 9, 2021

- Possibility of new physics not fading
  - <https://science.sciencemag.org/content/372/6538/113>
- Magnetars & gamma rays
  - <https://science.sciencemag.org/content/372/6538/120.summary>
- Enhanced x-ray emission coinciding with giant radio pulses from the Crab Pulsar
  - <https://science.sciencemag.org/content/372/6538/187>

# Nature – April 15, 2021

- Star formation near Milkyway galactic center
  - <https://iopscience.iop.org/article/10.3847/1538-4357/abde3c>
- Is the standard model broken? Physicists cheer muon result
  - <https://www.nature.com/articles/d41586-021-00898-z>

# Science – April 16, 2021

- No cosmology/astrophysics news this issue



# Nature – April 22, 2021

- Dark matter wake behind Large Magellanic Cloud
  - <https://www.nature.com/articles/s41586-021-03385-7>
- High-entropy ejecta plumes in Cassiopeia A from neutrino-driven convection
  - <https://www.nature.com/articles/s41586-021-03391-9>

# Science – April 23, 2021

- Ingenuity takes otherworldly first flight
  - <https://www.nasa.gov/press-release/nasa-ingenuity-mars-helicopter-prepares-for-first-flight>
- A fresh effort to glimpse black holes
  - <https://www.jpl.nasa.gov/news/telescopes-unite-in-unprecedented-observations-of-famous-black-hole>
- Weighing Psyche asteroid
  - <https://iopscience.iop.org/article/10.3847/2041-8213/abe948/meta>

# Nature – April 29, 2021

- First flight on Mars
  - <https://www.nature.com/articles/d41586-021-00909-z>

# Science – April 30, 2021

- How highly magnetized neutron stars set off powerful cosmic explosions: **Video:**
  - [www.youtube.com/watch?v=7jcdCLcgftA](http://www.youtube.com/watch?v=7jcdCLcgftA)
- Antimatter stars?
  - <https://www.sciencenews.org/article/antimatter-stars-antistars-milky-way-galaxy-space-astronomy>

# 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 a video to watch, as for example, these:
- <https://www.youtube.com/watch?v=O4Ko7NW2yQo>
- <https://www.youtube.com/watch?v=M-lvBDgFGj8>