

Cosmology/Astrophysics News

A vibrant, multi-colored image of the Whirlpool galaxy (NGC 5457). The galaxy is a classic spiral galaxy with a bright yellowish-white core. The spiral arms are filled with stars and interstellar dust, showing a rich palette of colors including deep blues, purples, pinks, and oranges. The background is a dark, starry field.

Possible planet spotted in
Whirlpool galaxy

October 2021 for Rose City Astronomers SIG

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

Science – October 1, 2021

- No cosmology/astrophysics news this issue

Nature – October 7, 2021

- Fine-regolith production on asteroids controlled by rock porosity
 - <https://www.nature.com/articles/s41586-021-03816-5>

Science – October 8, 2021

- Asteroid tour could reveal solar system's chaotic origin – NASA Lucy mission
 - <https://www.science.org/content/article/tour-jupiter-s-trojans-could-reveal-solar-system-s-chaotic-origin>
- A multiplanet system with a sub-Earth
 - <https://www.aanda.org/articles/aa/abs/2021/09/aa40728-21/aa40728-21.html>
- Satellite swarms threatening the night sky
 - <https://www.science.org/content/article/satellite-swarms-are-threatening-night-sky-creating-new-zone-environmental-conflict>

Nature – October 14, 2021

- Galaxies merged to grow in the early universe
 - <https://www.aanda.org/highlights/2320-the-alpine-alma-cii-survey-the-contribution-of-major-mergers-to-the-galaxy-mass-assembly-at-z-5>
- Venus might never have been habitable
 - <https://www.nature.com/articles/d41586-021-02720-2>
 - <https://www.nature.com/articles/s41586-021-03873-w>
- A bimodal burst energy distribution of a repeating fast radio burst source
 - <https://arxiv.org/pdf/2107.08205.pdf>
- A Jovian analogue orbiting a white dwarf star
 - <https://arxiv.org/pdf/2110.07934.pdf>

Science – October 15, 2021

- A compositional link between rocky exoplanets and their host stars
 - <https://arxiv.org/pdf/2102.12444.pdf>

Nature – October 21, 2021

- Carbon monoxide gas produced by a giant impact in the inner region of a young system
 - <https://www.nature.com/articles/s41586-021-03872-x>

Science – October 22, 2021

- No cosmology/astrophysics news this issue

Nature – October 28, 2021

- A mysterious object is beaming radio waves into the Milky Way
 - <https://www.nature.com/articles/d41586-021-02836-5>
- Call for a framework for reporting evidence for life beyond Earth
 - <https://www.nature.com/articles/s41586-021-03804-9>
- A solar C/O and sub-solar metallicity in a hot Jupiter atmosphere
 - <https://www.nature.com/articles/s41586-021-03912-6>

Science – October 29, 2021

- No cosmology/astrophysics news this issue

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 to watch, as for example, these:
 - https://www.nasa.gov/mission_pages/chandra/images/chandra-sees-evidence-for-possible-planet-in-another-galaxy.html
 - <https://www.youtube.com/watch?v=RQv5CVELG3U>
 - <https://www.youtube.com/watch?v=vb0UnogKQeo>
 - <https://www.youtube.com/watch?v=m515z9Yh3DY>
 - <https://www.youtube.com/watch?v=Rqv0588AmVw>