

Cosmology/Astrophysics News

Perseverance at Jezero Crater Rim

December 2024 for Rose City Astronomers SIG

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

Nature – December 5, 2024

- Warm glow hints at ice volcano on dwarf planet Makemake
 - <https://iopscience.iop.org/article/10.3847/2041-8213/ad8dcb>
- Antimatter to be transported outside a lab for the first time in a van
 - <https://www.nature.com/articles/d41586-024-03841-0>
- In situ spheroid formation in distant submillimetre-bright galaxies
 - <https://www.nature.com/articles/s41586-024-08201-6>

Science – December 6, 2024

- A dwarf group of dwarf galaxies
 - <https://doi.org/10.3847/2041-8213/ad8f3c>

Nature – December 12, 2024

- Distant sparkles hint at how the Milky Way formed
 - <https://www.nature.com/articles/d41586-024-03849-6>
 - <https://www.nature.com/articles/s41586-024-08293-0>

Science – December 13, 2024

- JWST probes the cosmic dawn
 - https://www.science.org/content/article/breakthrough-2024#section_galaxy-formation
- The superflare rate of Sun-like stars
 - <https://doi.org/10.1126/science.adl5441>

Nature – December 19/26, 2024

- A geologist is leading efforts to study the rock samples from the Moon's far side
 - <https://x.com/NaturePortfolio/status/1873096583333446050?mx=2>
- A dormant overmassive black hole in the early universe
 - <https://www.nature.com/articles/s41586-024-08210-5>
- Tidally driven remelting around 4.35 billion years ago indicates the Moon is old
 - <https://www.nature.com/articles/s41586-024-08231-0>

Science – December 20, 2024

- Mars rover makes it to the top
 - <https://www.jpl.nasa.gov/news/nasas-perseverance-rover-reaches-top-of-jezero-crater-rim/>
- Europa's surprisingly thick ice
 - <https://www.science.org/content/article/surprisingly-thick-ice-jupiter-s-moon-europa-complicates-hunt-life>
- Mysterious radio pulses traced to dance of stellar dwarfs
 - <https://www.science.org/content/article/mysterious-radio-pulses-traced-dance-stellar-dwarfs>
- Dating volcanism on the Moon's far side
 - <https://doi.org/10.1126/science.adt1093>

Miscellaneous

- I will post this monthly news possibly with zero or more videos and links to watch, as for example, these:
 - <https://www.youtube.com/watch?v=xoDPPuhASGw>
 - <https://www.youtube.com/watch?v=0rzgYzbzq5Q>
 - <https://www.youtube.com/watch?v=jxe3Helh2Ks>
 - <https://www.youtube.com/watch?v=HJ8F0pfNTgM>