

Cosmology/Astrophysics News

Death of star in planetary nebula ESO455-10



January 2021 for Rose City Astronomers SIG

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

Science – January 1, 2021

- James Webb Space Telescope passed shake test and is scheduled to launch October 31, 2021
- NASA's Perseverance rover to land on Mars on February 18, 2021
- China's Tianwen-1 to arrive at Mars around the same time

Nature – January 7, 2021

- First peek inside Mars reveals a crust with cake-like layers
 - <https://media.nature.com/original/magazine-assets/d41586-020-03562-0/d41586-020-03562-0.pdf>
- Core-collapse supernova explosion theory
 - <https://www.nature.com/articles/s41586-020-03059-w>

Science – January 8, 2021

- The hole truth – observability of black holes testing Einstein's theory
 - <https://science.sciencemag.org/content/371/6525/116.summary>
- Carbonaceous chondrite meteorites experienced fluid flow within the past million years
 - <https://science.sciencemag.org/content/371/6525/164.full>
- Lithium pollution of a white dwarf records the accretion of an extrasolar planetesimal
 - <https://science.sciencemag.org/content/371/6525/168>

Nature – January 14, 2021

- X-rays from J005311 suggest a new kind of star
 - <https://www.aanda.org/articles/aa/abs/2020/12/aa39232-20/aa39232-20.html>
- The icy shroud that gives Pluto the blues
 - <https://doi.org/fp6m>
- More distant giant magenta flare in NGC253 reveals details
 - <https://media.nature.com/original/magazine-assets/d41586-020-03657-8/d41586-020-03657-8.pdf>
 - <https://www.nature.com/articles/s41586-020-03077-8>
 - <https://www.nature.com/articles/d41586-020-03657-8>
 - <https://www.nature.com/articles/s41550-020-01287-8>

Science – January 15, 2021

- Planning a rebirth for Arecibo telescope
 - <https://science.sciencemag.org/content/371/6526/225>
- From nuclear clusters to neutron stars
 - <https://science.sciencemag.org/content/371/6526/232.summary>
 - <https://science.sciencemag.org/content/371/6526/260>

Nature – January 21, 2021

- No cosmology/astrophysics news this issue.

Science – January 22, 2021

- Bifurcation of planetary building blocks during Solar System formation
 - <https://science.sciencemag.org/content/371/6527/365>

Nature – January 28, 2021

- How Saturn got its tilt
 - <https://www.nature.com/articles/d41586-021-00174-0>

Science – January 29, 2021

- How magnetic is the muon? New results could soon point to new physics.
 - <https://news.fnal.gov/tag/muon-g-2/>
 - <https://science.sciencemag.org/content/371/6528/450>
 - <https://science.sciencemag.org/content/359/6374/381?intcmp=trendmd-sci>

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=GI0wJWJWPUs>
- <https://www.youtube.com/watch?v=kxvQ3Wyw2M4>