

Cosmology/Astrophysics News

Solar “tornadoes”



January 2023 for Rose City Astronomers SIG

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

Nature – January 5, 2023

- Intracluster light is already abundant at redshift beyond unity
 - <https://www.nature.com/articles/s41586-022-05396-4>

Science – January 6, 2023

- Why optics needs thickness
 - <https://www.science.org/doi/10.1126/science.ade3395>

Nature – January 12, 2023

- Colliding neutron stars ring in a clue to extreme-matter puzzle
 - <https://www.nature.com/articles/d41586-022-04580-w>
- Nuclear reaction rules out sterile neutrino hypothesis
 - <https://www.nature.com/articles/d41586-022-04581-9>
 - <https://www.nature.com/articles/s41586-022-05568-2>
- Kiloherz quasiperiodic oscillations in short gamma-ray bursts
 - <https://www.nature.com/articles/s41586-022-05497-0>

Science – January 13, 2023

- Future NASA HWO scope would find life on alien worlds
 - <https://www.science.org/content/article/nasa-unveils-initial-plan-multibillion-dollar-telescope-find-life-alien-worlds>
- Alien planet hazes hide clues to their makeup
 - <https://www.science.org/content/article/lifting-veil-astronomers-conjure-hazes-obscure-alien-worlds>

Nature – January 19, 2023

- Stellar initial mass function varies with metallicity and time
 - <https://www.nature.com/articles/s41586-022-05488-1>

Science – January 20, 2023

- Light pollution is skyrocketing
 - <https://www.science.org/doi/10.1126/science.adf4952>
 - <https://www.science.org/doi/10.1126/science.abq7781>
- Supernovae support a cosmological constant
 - <https://arxiv.org/abs/2202.04077>
- Spin-down by dynamo action in simulated radiative stellar layers
 - <https://www.science.org/doi/10.1126/science.abk2169>

Nature – January 26, 2023

- Dainty eater: black hole consumes a star bit by bit
 - <https://www.nature.com/articles/d41586-023-00074-5>
- Night skies are brightening – and dimming the outlook for astronomy
 - <https://www.nature.com/articles/d41586-023-00103-3>
- Star graveyard revealed in super-clear image of the Milky Way
 - <https://www.nature.com/articles/d41586-023-00110-4>

Science – January 27, 2023

- Earthlike planets should readily form around other stars, meteorites suggest

- <https://www.science.org/content/article/earthlike-planets-should-readily-form-around-other-stars-meteorites-suggest>

- Meteorites have inherited nucleosynthetic anomalies of potassium-40 produced in supernovae

- <https://www.science.org/doi/10.1126/science.abn1783>

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:
 - https://youtu.be/F_elfR3w8c
 - <https://youtu.be/tlJ3f5i6F9M>
 - <https://youtu.be/jkm1ON1sNII>
 - <https://youtu.be/qCGR7CiJ-Wo>