Cosmology/Astrophysics News

Young star HOPS-315 with
early planet formation

July 2025 for Rose City Astronomers SIG

http://101iq.com/RCA

Nature – July 3, 2025

- First images from Rubin observatory dazzle astronomers
  - https://www.nature.com/articles/d41586-025-01973-5
- Carbonate formation and fluctuating habitability on Mars
  - https://www.nature.com/articles/s41586-025-09161-1

Science – July 3, 2025

- No cosmology/astrophysics news this issue.

Nature – July 10, 2025

- How to chart a morel future for space exploration
  - https://www.nature.com/articles/d41586-025-02070-3
- First samples from the Moon's "dark side"
  - https://www.nature.com/articles/d41586-025-02050-7
- Lunar farside volcanism 2.8 billion years ago from Chang'e-6 basalts
  - https://www.nature.com/articles/s41586-024-08382-0
- A reinforced lunar dynamo recorded by Chang'e-6 farside basalt
  - https://www.nature.com/articles/s41586-024-08526-2
- Water abundance in the lunar farside mantle
  - https://www.nature.com/articles/s41586-025-08870-x
- Ultra-depleted mantle source of basalts from the South Pole-Aitken basin
  - https://www.nature.com/articles/s41586-025-09131-7

Science – July 10, 2025

- No cosmology/astrophysics news this issue.

Nature – July 17, 2025

- Rare find: Interstellar visitor seen blazing through Solar System
  - https://www.nature.com/articles/d41586-025-02141-5
- The origin of the oldest solids in the Solar System
  - https://www.nature.com/articles/d41586-025-02058-z
- Close-in planet induces flares on its host star
  - https://www.nature.com/articles/s41586-025-09236-z
  - https://www.nature.com/articles/d41586-025-02201-w
- Refractory solid condensation detected in an embedded protoplanetary disk
  - https://www.nature.com/articles/s41586-025-09163-z

Science – July 17, 2025

- Astronomers race to study third known interstellar interloper
  - https://www.science.org/content/article/astronomers-race-study-interstellar-interloper
- U.S. cancels hunt for signs of cosmic inflation
  - https://www.science.org/content/article/u-s-abandons-hunt-signal-cosmic-inflation

Nature – July 24, 2025

- Monster black hole merger is biggest ever seen
  - https://www.nature.com/articles/d41586-025-02212-7
- Birth of a solar system caught “on camera” for first time
  - https://www.nature.com/articles/d41586-025-02245-y
- Silicate clouds and a circumplanetary disk in YSES-1 exoplanet system
  - https://www.nature.com/articles/s41586-025-09174-w

Science – July 24, 2025

- All-sky radio telescopes ditch the dish
  - https://www.science.org/content/article/new-kind-telescope-set-search-mysterious-fast-radio-bursts
- How to remove a planet's atmosphere
  - https://iopscience.iop.org/article/10.3847/PSJ/add929

Nature – July 31, 2025

- “Immortal” stars have an elixir of youth: dark matter
  - https://www.nature.com/articles/d41586-025-02294-3
- Physicists disagree wildly on what quantum mechanics says about reality
  - https://www.nature.com/articles/d41586-025-02342-y
- Observation of elusive interaction between neutrinos and atomic nuclei
  - https://www.nature.com/articles/d41586-025-02134-4

Science – July 31, 2025

- Early universe's "little red dots" may be black hole stars
  - https://www.science.org/content/article/early-universe-s-little-red-dots-may-be-black-hole-stars

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=-oX7tfz80DU
  - https://www.youtube.com/watch?v=HX1EfW3euY4
  - https://www.youtube.com/watch?v=KQ2jL-JxASU
  - https://www.youtube.com/watch?v=Dr8CJAOlGVc