Sun on September 1, 2024

#### **Cosmology/Astrophysics News**

#### August 2024 for Rose City Astronomers SIG

http://101iq.com/RCA

### Nature – August 1, 2024

- A hot-Jupiter progenitor on a super-eccentric retrograde orbit
  - <u>https://www.nature.com/articles/s41586-024-07688-3</u>

#### Science – August 2, 2024

• No cosmology/astrophysics news this issue

#### Nature – August 8, 2024

- Calculation show that it is impossible to create a black hole from light alone
  - <u>https://www.nature.com/articles/d41586-024-02505-3</u>

# Science – August 9, 2024

• Could my lifelong love for astronomy be more than a pastime?

<u>https://www.science.org/content/article/love-night-sky-emboldened-pursue-new-dreams</u>

# Nature – August 15, 2024

- Are these the earliest-known star clusters?
  - <u>https://www.nature.com/articles/s41586-024-07703-7</u>
  - <u>https://www.nature.com/articles/d41586-024-02438-x</u>

# Science – August 16, 2024

- New results intensify debate over cosmic expansion rate
  - <u>https://www.science.org/content/article/space-telescope-data-reignite-debate-over-how-fast-universe-expanding-and-whether-new</u>
- Dino-killing asteroid came from beyond Jupiter
  - <u>https://www.science.org/content/article/dino-killing-asteroid-came-beyond-jupiter</u>
- Ruthenium isotopes show the Chicxulub impactor was a carbonaceous-type asteroid
  - <u>https://www.science.org/doi/10.1126/science.adk4868</u>

# Nature – August 22, 2024

- Black holes are too scarce to explain dark matter
  - <u>https://x.com/Nature/status/1825664374700179887</u>
- No massive black holes in the Milky Way halo
  - <u>https://www.nature.com/articles/s41586-024-07704-6</u>

### Science – August 23, 2024

• No cosmology/astrophysics this issue.

# Nature – August 29, 2024

- Black holes regulate cool gas accretion in massive galaxies
  - <u>https://www.nature.com/articles/s41586-024-07821-2</u>
- A nebular origin for the persistent radio emission of fast radio bursts
  - <u>https://www.nature.com/articles/s41586-024-07782-6</u>
- Inhomogeneous terminators on the exoplanet WASP-39b
  - <u>https://www.nature.com/articles/s41586-024-07768-4</u>

# Science – August 30, 2024

- Interplanetary rendezvous at a solar wind stream
  - <u>https://www.science.org/doi/10.1126/science.adr5854</u>
- In situ observations of large-amplitude Alfven waves heating and accelerating the solar wind
  - <u>https://www.science.org/doi/10.1126/science.adk6953</u>

### Miscellaneous

- I will post this monthly news possibly with zero or more videos and links to watch, as for example, these:
  - <u>https://www.youtube.com/watch?v=w6zi95SknZw</u>
  - <u>https://www.youtube.com/watch?v=3Illx0WkCxU</u>
  - <u>https://www.youtube.com/watch?v=WQwwn5cGn5w</u>
  - <u>https://www.youtube.com/watch?v=yfzosycRoe4</u>
  - <u>https://www.youtube.com/watch?v=T1JuCPhONlg</u>