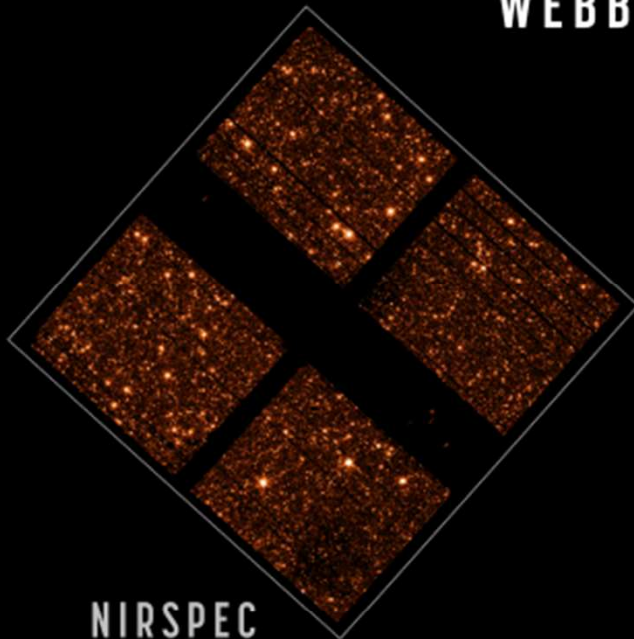


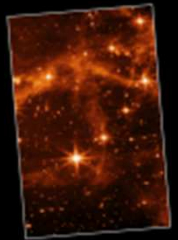
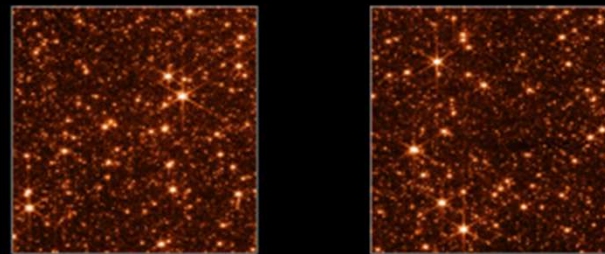
Cosmology/Astrophysics News

WEBB TELESCOPE IMAGE SHARPNESS CHECK

Alignment complete

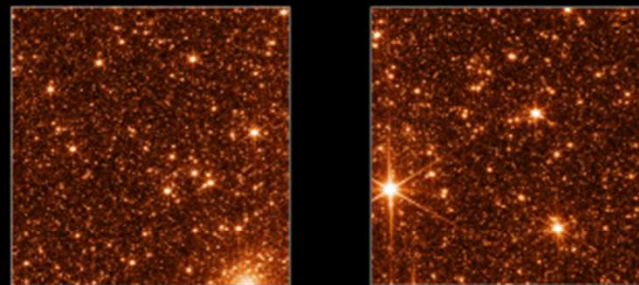


NIRCAM

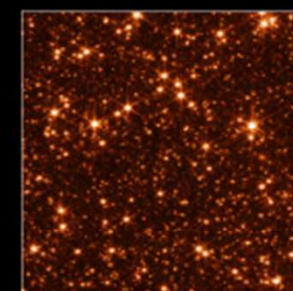


MIRI

FINE GUIDANCE SENSOR



NIRISS



April 2022 for Rose City Astronomers SIG

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

Science – April 1, 2022

- LBNF/DUNE neutrino detector projects
 - <https://www.science.org/content/article/trying-stay-ahead-competition-u-s-pares-down-troubled-3-billion-neutrino-experiment>

Nature – April 7, 2022

- Bizarre space circle captured in unprecedented detail
 - <https://www.nature.com/articles/d41586-022-00861-6>
- Documents reveal NASA's internal struggles over renaming Webb telescope
 - <https://www.nature.com/articles/d41586-022-00845-6>

Science – April 8, 2022

- With upgrade, telescope to pinpoint radio bursts
 - <https://www.science.org/content/article/homespun-canadian-telescope-could-explain-mysterious-radio-signals-distant-universe>
- Europe tries to save Mars rover after split with Russia
 - <https://www.science.org/content/article/europe-fights-keep-mars-rover-alive-after-split-russia>
- New estimate of W boson mass conflicts with prediction from standard model
 - <https://www.science.org/content/article/mass-rare-particle-may-conflict-standard-model-signaling-new-physics>
 - <https://www.science.org/doi/10.1126/science.abm0101>
 - <https://www.science.org/doi/10.1126/science.abk1781>

Nature – April 14, 2022

- Particles' (W boson) surprise mass threatens to upend the standard model of physics
 - <https://www.nature.com/articles/d41586-022-01014-5>
- A dusty compact object bridging galaxies and quasars at cosmic dawn
 - <https://www.nature.com/articles/s41586-022-04454-1>

Science – April 15, 2022

- No cosmology/astrophysics this issue

Nature – April 21, 2022

- China is hatching a plan to find Earth 2.0
 - <https://www.nature.com/articles/d41586-022-01025-2>
- Localized thermonuclear bursts from accreting magnetic white dwarfs
 - <https://www.nature.com/articles/s41586-022-04495-6>

Science – April 22, 2022

- Europe quits Russian Moon missions
 - <https://www.space.com/europe-moon-partnership-russia-ukraine-rocket-engines>
- Uranus should be NASA's top target, report finds
 - <https://www.science.org/content/article/uranus-should-be-nasa-s-top-planetary-target-influential-report-finds>
- Dutch dangle bid for gravitational wave detector
 - <https://www.science.org/content/article/dutch-pledge-nearly-billion-to-support-underground-wave-detector>
- How Ceres got there
 - <https://solarsystem.nasa.gov/planets/dwarf-planets/ceres/in-depth/>

Nature – April 28, 2022

- Uranus priority for NASA
 - <https://www.nature.com/articles/d41586-022-01087-2>
- Early Solar System Instability triggered by dispersal of the gaseous disk
 - <https://www.nature.com/articles/s41586-022-04535-1>

Science – April 29, 2022

- A quantum sense for dark matter
 - <https://www.science.org/content/article/crack-mystery-dark-matter-physicists-turn-super-sensitive-quantum-sensors>
- A gamma-ray pulsar timing array constrains the nanohertz gravitational wave background
 - <https://www.science.org/doi/10.1126/science.abm3231>

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://www.youtube.com/watch?v=MmvvRw9LfXY>
 - <https://www.youtube.com/watch?v=G0Q4UAiKacw>
 - <https://www.youtube.com/watch?v=DHR-ggwafO8>
 - <https://www.youtube.com/watch?v=cDQZXvplXKA>