

Tranquility Base July 20, 1969

# Cosmology/Astrophysics News

July 10, 2019 for Rose City Astronomers SIG

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

# Science – June 14, 2019

- X-ray telescope keeps Russia's space science hopes alive
  - <https://science.sciencemag.org/content/364/6445/1020>
- Close-range remote sensing of Saturn's rings during Cassini's ring-grazing orbits and Grand Finale
  - <https://science.sciencemag.org/content/364/6445/eaau1017.abstract>
- Close Cassini flybys of Saturn's moons Pan, Daphnis, Atlas, Pandora, and Epimetheus
  - <https://science.sciencemag.org/content/364/6445/eaat2349.abstract>
- Measurement and implications of Saturn's gravity field and ring mass
  - <https://science.sciencemag.org/content/364/6445/eaat2965.abstract>
- Cassini-Huygens' exploration of the Saturn system: 13 years of discovery
  - <https://science.sciencemag.org/content/364/6445/1046.abstract>
- Origin of Saturn's rings and moons
  - <https://science.sciencemag.org/content/364/6445/1028.summary>

# Nature – June 20, 2019

- No cosmology/astrophysics news this issue

# Science – June 21, 2019

- No cosmology/astrophysics news this issue

# Nature – June 27, 2019

- Record methane level found on Mars by Curiosity rover – 21 parts per billion, 3x highest previous level – transient gas plume
- 30 Meter telescope surmounts last legal hurdle, but protesters plan to disrupt construction

# Science – June 28, 2019

- Giant telescope set to rise on hallowed peak in Hawaii
  - <https://science.sciencemag.org/content/364/6447/1220.summary>

# Nature – July 4, 2019

- NASA to send nuclear powered dual quadcopter to hop from place to place on Titan
  - <https://www.nasa.gov/press-release/nasas-dragonfly-will-fly-around-titan-looking-for-origins-signs-of-life>
- Astronomers tracked 4 meter asteroid on June 22 before it burned up over Puerto Rico
  - <https://earthsky.org/space/asteroid-2019-mo-struck-earth-june-22-2019>

# Science – July 5, 2019

- NASA to fly drone on Titan
  - <https://science.sciencemag.org/content/365/6448/15.1.summary>



# Scientific American July 2019

- <https://www.scientificamerican.com/magazine/sa/2019/07-01/> Articles:
- One Small Step Back in Time
- Mapping the Mission
- The New Scramble for the moon
- 50 Years of Moon Missions: Graphic
- When Earth and the Moon Were One
- Apollo's Bounty: The science of the Moon Rocks

# Miscellaneous

- No meeting August
- September 18 – normal meeting day