

Cosmology/Astrophysics News

Event Horizon
Telescope's first
image of a black
hole in M87



April 10, 2019 for Rose City Astronomers SIG

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

Event Horizon Telescope – April 10, 2019

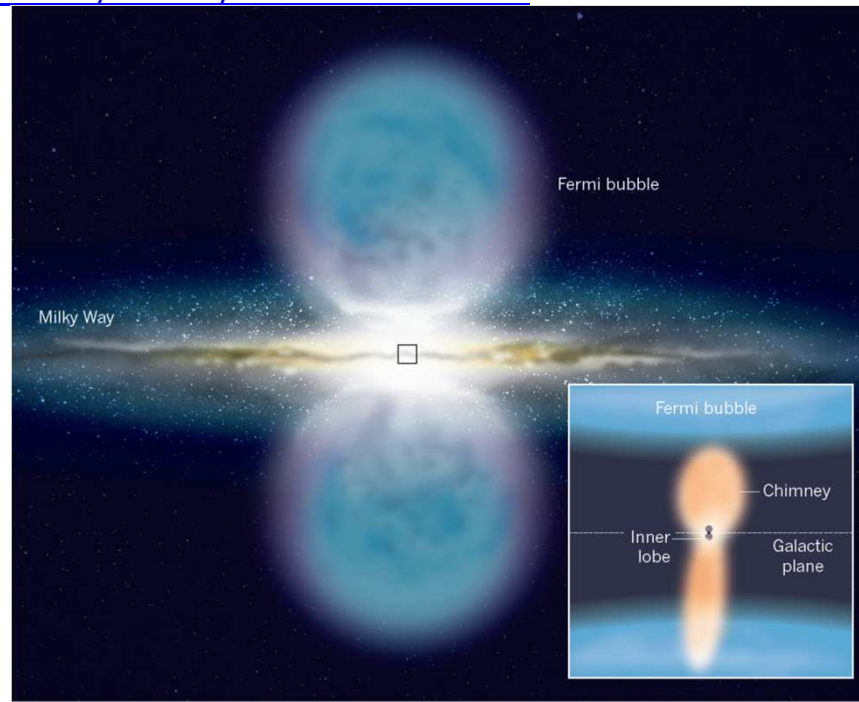
- First image of black hole in M87
- Used millimeter wavelength telescopes around world
 - Arizona Radio Observatory (ARO/SMT) Arizona
 - Atacama Large Millimeter/Submillimeter Array (ALMA) Chile
 - IRAM 30 meter telescope - Spain
 - James Clerk Maxwell Telescope (JCMT) Hawaii
 - Large Millimeter Telescope (LMT) Mexico
 - Submillimeter Array (SMA) Hawaii
 - South Pole Telescope (SPT) Antarctica
- Video of announcement:
 - <https://www.youtube.com/watch?v=m4NYuy8dwuk>
- Papers:
 - <https://arxiv.org/pdf/1802.05783.pdf>
 - <https://arxiv.org/pdf/1804.05861.pdf>
 - <https://arxiv.org/pdf/1805.09344.pdf>
 - <https://arxiv.org/pdf/1805.09346.pdf>
 - <https://arxiv.org/pdf/1804.06416.pdf>
 - <https://arxiv.org/pdf/1804.05903.pdf>
 - <https://arxiv.org/pdf/1706.07062.pdf>
 - <https://eventhorizontelescope.org/publications>

Science – March 15, 2019

- Canadian Hydrogen Intensity Mapping Experiment (CHIME) looking for mysterious Fast Radio Bursts (FRB's)
 - <https://science.sciencemag.org/content/363/6432/1138>

Nature – March 21, 2019

- Mars Insight lander detects infrasonic sound from weather
- Asteroid Bennu has complex surface making sample return by NASA's OSIRIS-Rex craft a challenge
 - <https://www.nature.com/articles/s41586-019-1033-6>
- X-ray chimneys in the Milkyway Center
 - <https://www.nature.com/articles/d41586-019-00811-9>
 - <https://www.nature.com/articles/s41586-019-1009-6>



Science – March 22, 2019

- No cosmology/astrophysics news this issue

Nature – March 28, 2019

- Fresh look at Moon rocks from Apollo missions may guide lunar exploration
 - <https://www.nature.com/articles/d41586-019-00963-8>

Science – March 29, 2019

- Israeli lander demonstrates a cut-rate route to the moon
 - <https://science.sciencemag.org/content/363/6434/1373>

Nature – April 4, 2019

- Hubble spots Neptunian storm
 - <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019GL081961>
- LIGO restarts with quantum boost
 - <https://www.scientificamerican.com/article/gravitational-wave-hunt-restarts-with-a-quantum-boost1/>

Scientific American – April 2019

- Quantum Gravity in the Lab – new proposals to test
 - <https://www.scientificamerican.com/article/quantum-gravity-in-the-lab/>
 - <https://iopscience.iop.org/article/10.1088/0264-9381/33/12/125031/pdf>
 - <https://arxiv.org/pdf/1707.06036.pdf>
 - <https://arxiv.org/pdf/1707.06050.pdf>
 - <https://arxiv.org/pdf/1107.3164.pdf>

Miscellaneous

- Next meeting will be May 22 (normal day)