

Rosette Nebula NGC 2244

Cosmology/Astrophysics News

March 23, 2016

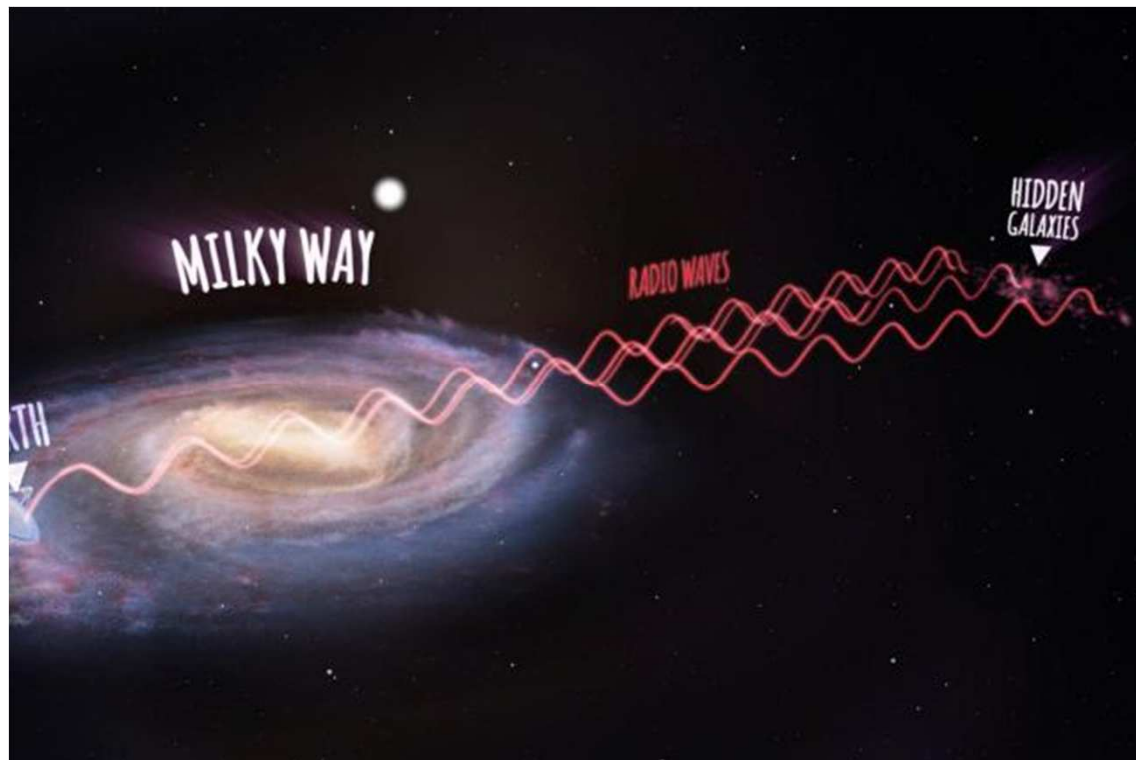
for Rose City Astronomers SIG

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

Science Explorer February 12, 2016

- Newly Discovered Galaxies May Shed Light on the Mysterious “Great Attractor”

– <http://thescienceexplorer.com/universe/newly-discovered-galaxies-may-shed-light-mysterious-great-attractor>



Nature – February 18, 2016

- LIGO's path to victory
 - <http://www.nature.com/news/gravitational-waves-1.19321>
- Young scientists poised to ride the gravitational wave
 - <http://www.nature.com/news/young-scientists-poised-to-ride-the-gravitational-wave-1.19383>
- The Light of Other Worlds - exoplanets
 - <http://www.nature.com/news/the-truth-about-exoplanets-1.19388>
- Super-catastrophic disruption of asteroids at small perihelion distances
 - <http://www.nature.com/nature/journal/v530/n7590/full/nature16934.html>

Science – February 19, 2016

- Gravitational waves serve up a mystery
 - <http://science.sciencemag.org/content/351/6275/796>
- Scientist who spotted the fateful signal and let the cat out of the bag
 - <http://science.sciencemag.org/content/351/6275/797>
- The next BIG EYE – James Webb Space Telescope
 - <http://science.sciencemag.org/content/351/6275/804>

Nature – February 25, 2016

- First super-Earth atmosphere – hydrogen cyanide...
 - <http://arxiv.org/abs/1511.08901v2>
- NASA to launch Wide Field Infrared Survey Telescope in mid-2020's – dark energy and matter
 - <http://wfirst.gsfc.nasa.gov/>
- Home of a fast radio burst – FRB 150418 in a galaxy 6 billion light years away
 - <http://www.nature.com/nature/journal/v530/n7591/full/530427a.html>
 - <http://www.nature.com/nature/journal/v530/n7591/full/nature17140.html>

Science – February 26, 2016

- NASA's next telescope – WFIRST after Webb
 - <http://scim.ag/WFIRST>
- Japan's Hitomi x-ray telescope launched 2/17
 - <http://www.space.com/31968-japan-x-ray-observatory-launch-hitomi.html>

Nature – March 3, 2016

- The early geology of Mars – Tharsis volcanic bulge started 3.7 million years ago
 - <http://www.nature.com/nature/journal/v531/n7594/full/nature17171.html>
- Fast radio burst repeating from FRB121102 support origin in young, highly-magnetized, extragalactic neutron star
 - <http://www.nature.com/nature/journal/v531/n7593/full/nature17168.html>
- Dawn of a new astronomy
 - <http://www.nature.com/nature/journal/v531/n7592/full/nature17306.html>
- A large light-mass component of cosmic rays at 10^{17} – $10^{17.5}$ electronvolts from radio observations
 - <http://www.nature.com/nature/journal/v531/n7592/full/nature16976.html>

Science – March 4, 2016

- Fast radio bursts tease astronomers – conflicting results suggest the potent blasts come in two flavors
 - <http://science.sciencemag.org/content/351/6277/1012>
- Scientists to drill into dinosaur-killing blast
 - <http://science.sciencemag.org/content/351/6277/1015>

Nature – March 10, 2016

- LHC hints at unpredicted new neutral boson particle 4 times heavier than top quark and 6 times more than Higgs
 - <http://www.nature.com/news/who-ordered-that-1.19514>
 - <http://www.nature.com/news/lhc-sees-hint-of-boson-heavier-than-higgs-1.19036>
- Chinese space based gravitational-wave detector proposals
 - <http://www.nature.com/news/chinese-gravitational-wave-hunt-hits-crunch-time-1.19520>
- A repeating fast radio burst
 - <http://www.nature.com/nature/journal/v531/n7593/full/nature17168.html>

Science – March 11, 2016

- Mercury is covered with graphite
 - <http://www.nature.com/nature/journal/v531/n7593/full/nature17168.html>
- ESA's Mars orbiter "Trace Gas Orbiter" (TGO) to sniff for methane
 - <http://science.sciencemag.org/content/351/6278/1122>
- In search of spacetime megawaves – using pulsars
 - <http://science.sciencemag.org/content/351/6278/1124>
- An unusual satellite of the Milky Way – dwarf galaxy
 - <http://science.sciencemag.org/content/351/6278/1163.6>

Nature – March 17, 2016

- Milky Way's bulging waistline – 20 billion solar masses
 - <http://www.nature.com/nature/journal/v531/n7594/full/531279d.html>
- Mars launch puts Russia-Europe team to the test – ExoMars orbiter/lander
 - <http://www.nature.com/news/mars-launch-to-test-collaboration-between-europe-and-russia-1.19547>
- On the hunt for a mystery planet 9
 - <http://www.nature.com/news/on-the-hunt-for-a-mystery-planet-1.19565>
- Positron annihilation signatures associated with the outburst of the microquasar V404 Cygni
 - <http://www.nature.com/nature/journal/v531/n7594/full/nature16978.html>
- Late Tharsis formation and implications for early Mars
 - <http://www.nature.com/nature/journal/v531/n7594/full/nature17171.html>

Scientific American – March 2016

- The Puzzle of Dark Energy

- <http://www.nature.com/scientificamerican/journal/v314/n3/full/scientificamerican0316-38.html>
- Almost 20 years ago scientists discovered that the expansion of the universe is accelerating and dubbed the source of this acceleration “dark energy.”
- Intensive investigations since then have not resolved the nature of dark energy but rather exposed a number of further questions: Why is dark energy so much weaker than theory seems to predict, what does it mean for the future of the cosmos, and might dark energy lead to the conclusion that we live in a multiverse?
- With the advent of several recent and upcoming experiments, scientists hope that the coming years will finally bring some answers.