



# Cosmology/Astrophysics News

June 22, 2016

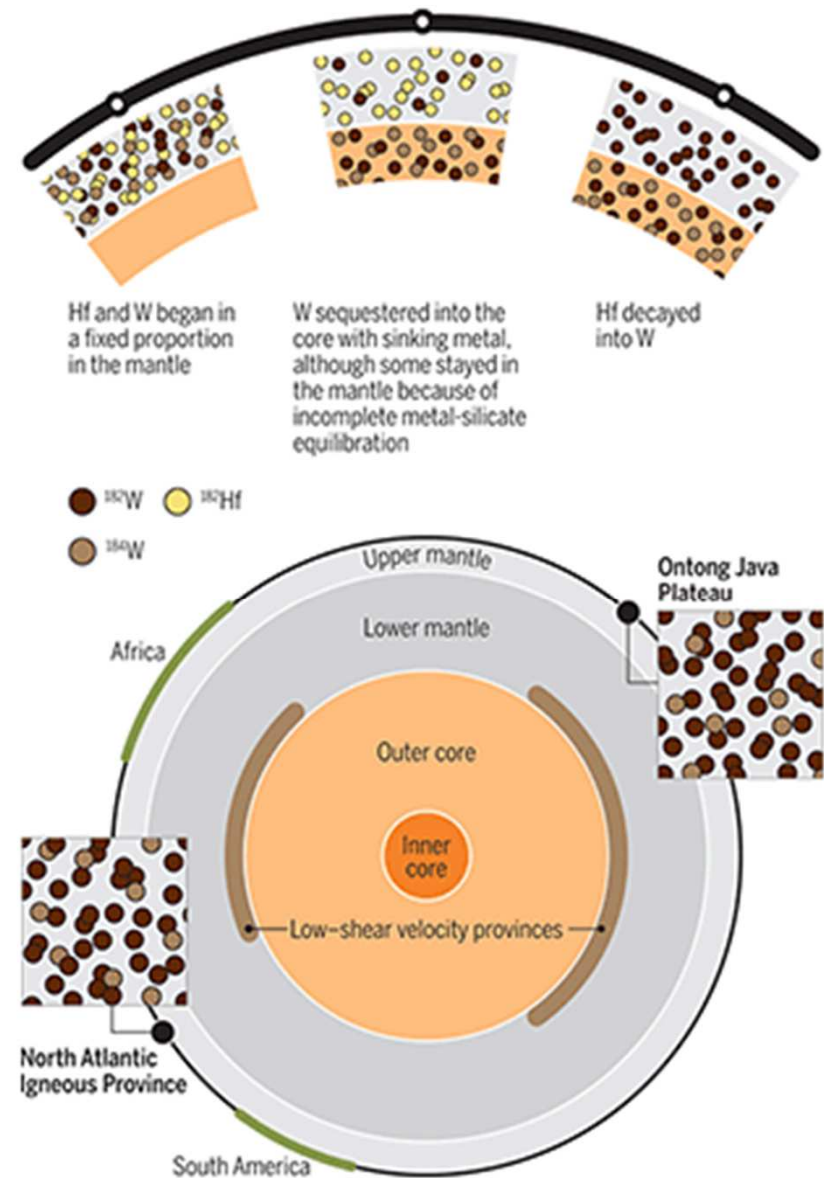
for Rose City Astronomers SIG

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

# Science – May 13, 2016

- Identifying remnants of early Earth

- <http://science.sciencemag.org/content/352/6287/768>
- <http://science.sciencemag.org/content/352/6287/809>



# Nature – May 19, 2016

- Model predicts neutron-star-binary gravity signal
  - <http://www.nature.com/nature/journal/v533/n7603/full/533294c.html>
  - <http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.116.181101>
- Black hole weighed with precision in NGC 1332
  - <http://arxiv.org/abs/1605.01346>
- Illuminating brown dwarfs (using nearby star)
  - <http://www.nature.com/nature/journal/v533/n7603/full/533330a.html>
  - <http://www.nature.com/nature/journal/v533/n7603/full/nature17952.html>

# Science – May 20, 2016

- No cosmology or astrophysics this issue

# Nature – May 26, 2016

- Invest in neutrino astronomy
  - <http://www.nature.com/news/physics-invest-in-neutrino-astronomy-1.19954>
- How black holes restrain old galaxies
  - <http://www.nature.com/nature/journal/v533/n7604/full/533473a.html>
  - <https://arxiv.org/abs/1605.07626>
- A resonant chain of four transiting, sub-Neptune planets
  - <http://www.nature.com/nature/journal/v533/n7604/full/nature17445.html>

# Science – May 27, 2016

- An ice age recorded in the polar deposits of Mars
  - <http://science.sciencemag.org/content/352/6289/1075>
- Shooting for a star – using lasers to push tiny craft
  - <http://science.sciencemag.org/content/352/6289/1040>



# Nature – June 2, 2016

- Hubble spots 13-billion year old galaxy
  - <http://iopscience.iop.org/article/10.3847/2041-8205/823/1/L14/meta>
  - <http://www.sci-news.com/astronomy/faintest-early-universe-galaxy-03887.html>
- First flight for tiny satellites – chipsats, July 6 test
  - <http://www.nature.com/news/tiny-chipsat-spacecraft-set-for-first-flight-1.20006>
- Pluto's polygons explained
  - <http://www.nature.com/nature/journal/v534/n7605/full/534040a.html>
  - <http://www.nature.com/nature/journal/v534/n7605/full/nature18016.html>
  - <http://www.nature.com/nature/journal/v534/n7605/full/nature18289.html>
- Regulation of black-hole accretion by a disk wind during a violent outburst of V404 Cygni
  - <http://www.nature.com/nature/journal/v534/n7605/full/nature17446.html>

# Science – June 3, 2016

- Telescope and NASA mission get under Jupiter's skin
  - <http://science.sciencemag.org/content/352/6290/1155>
  - <https://www.sciencenews.org/article/jupiter%E2%80%99s-stormy-weather-no-tempest-teapot>
- Deal inked for 39 meter telescope – European Extremely Large Telescope (E-ELT)
  - <http://bit.ly/EELTdeal>





# Nature – June 9, 2016

- Cold, clumpy accretion onto an active supermassive black hole
  - <http://www.nature.com/nature/journal/v534/n7606/full/nature17969.html>

# Science – June 10, 2016

- LISA Pathfinder passes test
  - <http://sci.esa.int/lisa-pathfinder/57906-lisa-pathfinder-exceeds-expectations/>
  - <http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.116.231101>

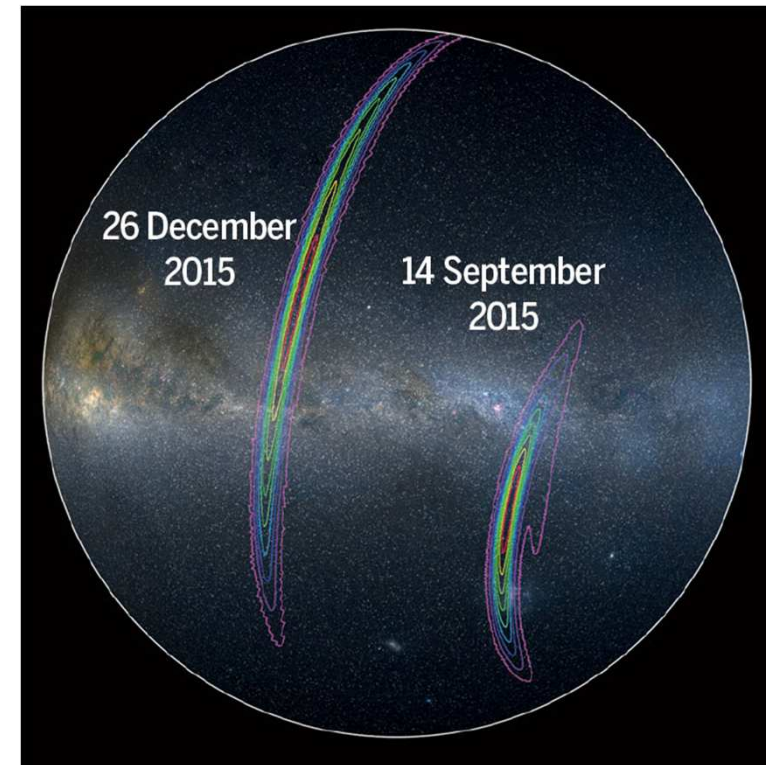
# Nature – June 16 , 2016

- LIGO strikes again – detected gravity waves  
Dec 26, 2015.
  - <http://www.ligo.org/news/GW151226-press-release.pdf>
- Fission and reconfiguration of bilobate  
comets as revealed by 67P/Churyumov-  
Gerasimenko
  - <http://www.nature.com/nature/journal/v534/n7607/full/nature17670.html>

# Science – June 17, 2016

- LIGO detects more gravity waves
  - <http://www.sciencemag.org/news/2016/06/ligo-detects-another-black-hole-crash>

“merger of two black holes—**14 and 8 times the mass of the sun**—to produce a single, more massive spinning black hole that is **21 times the mass of the sun**... **1.4 billion years ago**... a quantity of **energy roughly equivalent to the mass of the sun** was converted into gravitational waves. “



# Scientific American – June 2016

- Japan proposing International Linear Collider (ILC) to test supersymetry
- Stellar Fireworks – Every year thousands of exploding stars appear in a bizarre assortment of forms. Astronomers want to know what makes them go boom.
  - <http://www.nature.com/scientificamerican/journal/v314/n6/full/scientificamerican0616-36.html>