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

• Black hole weighed with precision in NGC 1332

• 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

• How black holes restrain old galaxies
  – [http://www.nature.com/nature/journal/v533/n7604/full/533473a.html](http://www.nature.com/nature/journal/v533/n7604/full/533473a.html)

• A resonant chain of four transiting, sub-Neptune planets
  – [http://www.nature.com/nature/journal/v533/n7604/full/nature17445.html](http://www.nature.com/nature/journal/v533/n7604/full/nature17445.html)

http://101iq.com/RCA
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
Hubble spots 13-billion year old galaxy

First flight for tiny satellites – chipsats, July 6 test

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](http://science.sciencemag.org/content/352/6290/1155)

• Deal inked for 39 meter telescope – European Extremely Large Telescope (E-ELT)

• 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/

• LIGO strikes again – detected gravity waves Dec 26, 2015.

• Fission and reconfiguration of bilobate comets as revealed by 67P/Churyumov-Gerasimenko
  – http://www.nature.com/nature/journal/v534/n7607/full/nature17670.html
LIGO detects more gravity waves


“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 supersymmetry

• Stellar Fireworks – Every year thousands of exploding stars appear in a bizarre assortment of forms. Astronomers want to know what makes them go boom.