

# Cosmology/Astrophysics News

A large, golden-yellow planet, likely Saturn, is shown in a close-up view. The planet's surface is a uniform golden-yellow color, and it features a prominent, bright, glowing ring system around its equator. The planet is set against a dark, black background. The text "Cosmology/Astrophysics News" is overlaid on the top left of the image.

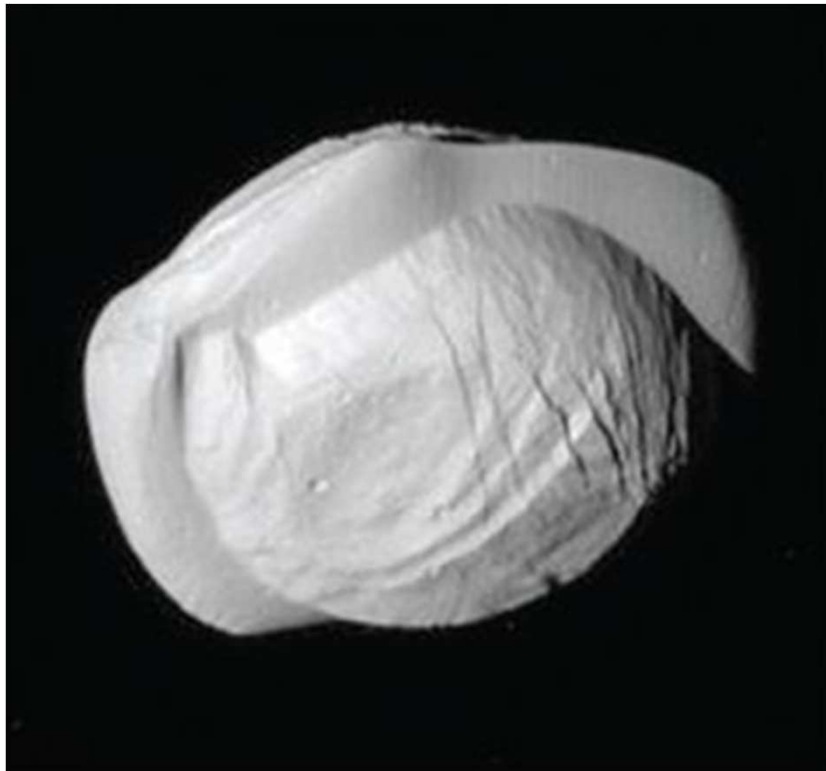
April 19, 2017

for Rose City Astronomers SIG

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

# Science – March 17, 2017

- Ronald Drever, co-founder of LIGO, has died
  - <http://www.sciencemag.org/news/2017/03/ronald-drever-co-founder-ligo-has-died>
- Saturn moon (Pan) or space empanada?
  - [http://www.sciencemagazinedigital.org/sciencemagazine/17\\_march\\_2017?pg=14#pg14](http://www.sciencemagazinedigital.org/sciencemagazine/17_march_2017?pg=14#pg14)



# Nature – March 23, 2017

- Star orbits close to black hole
  - <http://adsabs.harvard.edu/abs/2017MNRAS.467.2199B>
- How to hunt for a black hole using the EHT Event Horizon Telescope
  - <http://www.nature.com/news/how-to-hunt-for-a-black-hole-with-a-telescope-the-size-of-earth-1.21693>

# Science – March 24, 2017

- In search for unseen matter, physicists turn to dark sector – dark photons?
  - <http://science.sciencemag.org/content/355/6331/1251>
- Identifying the hosts of quasar absorbers
  - <http://science.sciencemag.org/content/355/6331/1285>

# Nature – March 30, 2017

- Titan's electrified dunes
  - <http://www.nature.com/nature/journal/v543/n7647/full/543592b.html>
  - <http://dx.doi.org/10.1038/ngeo2921>
- Landslides cause comet eruptions
  - <http://doi.org/b4r6>
- A star is born – star formation in galactic outflow
  - <http://www.nature.com/nature/journal/v544/n7649/full/nature21677.html>
- Reckless orbiting in the Solar System – asteroid in Jupiter's orbit goes in opposite direction
  - <http://www.nature.com/nature/journal/v543/n7647/full/nature22029.html>

# Science – March 31, 2017

- Surface changes on comet 67P/Churyumov-Gerasimenko suggest a more active past
  - <http://science.sciencemag.org/content/early/2017/03/20/science.aak9384>
- Mars' atmospheric history derived from upper-atmosphere measurements of Ar38 / Ar36
  - <http://science.sciencemag.org/content/355/6332/1408>

# Nature – April 6, 2017

- The search for no neutrinos – why there is more matter than antimatter
  - <http://www.nature.com/nature/journal/v544/n7648/full/544038a.html>
  - <http://www.nature.com/nature/journal/v544/n7648/full/nature21717.html>
- A massive, quiescent galaxy at a redshift of 3.717
  - <http://www.nature.com/nature/journal/v544/n7648/full/nature21680.html>

# Science – April 7, 2017

- No cosmology/astrophysics news this issue



# Nature – April 13, 2017

- Neutrino anomaly – from nearby reactors
  - <http://arxiv.org/abs/1704.01082>
- Muons' big moment – measuring magnetic moment at Brookhaven – muon anomaly may mean new particles
  - <http://www.nature.com/news/muons-big-moment-could-fuel-new-physics-1.21811>
- Cassini's science swan-song
  - <http://www.nature.com/news/saturn-spacecraft-begins-science-swan-song-1.21813>
- Star formation inside a galactic outflow
  - <http://www.nature.com/nature/journal/v544/n7649/full/nature21677.html>

# Science – April 14, 2017

- Cassini embarks on twilight mission at Saturn – may determine mass and age of rings
  - <http://science.sciencemag.org/content/356/6334/120>
- Food for microbes abundant on Enceladus
  - **VIDEO:** <http://www.sciencemag.org/news/2017/04/food-microbes-abundant-enceladus>
- Giant radio telescope faces downsizing
  - <http://science.sciencemag.org/content/356/6334/124>
- Detecting molecular hydrogen on Enceladus
  - <http://science.sciencemag.org/content/356/6334/132>
  - <http://science.sciencemag.org/content/356/6334/155>

# Scientific American – April 2017

- Sky is the Limit – A 3<sup>rd</sup> gravitational wave detector (Virgo) could soon help pinpoint origin
  - <https://www.scientificamerican.com/article/new-detector-could-soon-narrow-down-gravitational-wave-sources/>
- How to Swallow a Sun – how supermassive black holes shred stars
  - <http://www.nature.com/scientificamerican/journal/v316/n4/full/scientificamerican0417-38.html>

# Miscellaneous

- Visit new journal: ACS Earth and Space Chemistry:
  - <http://pubs.acs.org/toc/aescq/1/1>
- Free sign up for The Scientist:
  - <http://www.the-scientist.com/>
  - <http://www.the-scientist.com/?subscribe.now>
- Get AAAS Science + T-shirt at sharp discount (only \$40 for a year) – offer until April 22, 2017:
  - <https://pubs.aaas.org/Promo>