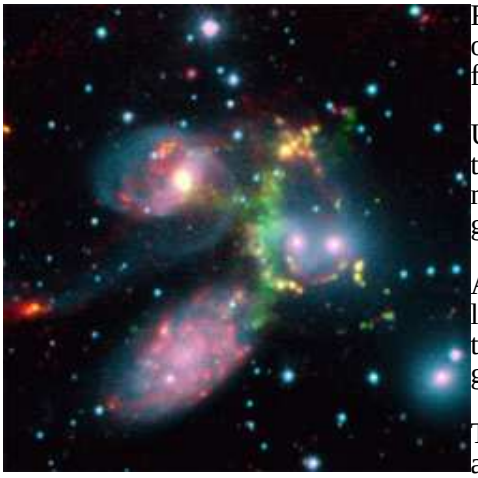
Stars and Planets Blog

Illuminating Your Universe!

Gigantic Cosmic Cataclysm in Stephan's Quintet of Galaxies

Filed under: Stars and Planets, Astronomy — Atlantean at 11:26 pm on Friday, March 3, 2006



Recent observations of Stephan's Quintet has revealed the presense of a huge intergalactic "sonic boom" in the center of the five-galaxy cluster.

Using the Spitzer Space Telescope, the discovery by an international team of scientist of this phenomenon provides a local view of what might have happened early univer when vast collisions and mergers of galaxies were common.

Astronomers have long known that this group of galaxies, 300 million light-years distant, have a distorted distribution of visible light from the stars within, indicating that the galaxies have engaged other galaxies in the past and are even now experiencing more collisions.

The reletively new Spitzer Space Telescope has enabled astronomers to measure what, apart from the stars, is present in Stephan's Quintet. By looking in the radio and X-rays they discovered huge quantities of gas - about 100,000 million solar masses, mainly composed of hydrogen and helium - in the space between the galaxies, more than all the gas within the galaxies themselves.

They discovered that one of the galaxies, called NGC7318b, which is falling towards the others at high speed, is generating a giant shock wave in front of it - larger even than the Milky Way - as it ploughs its way through the intergalactic gas.

The results of this amazing discovery are to be published on March 10th in a paper in the Astrophysical Journal Letters.

Comments (0)

High-pressure form of ice tells tales of giant icy moons

Filed under: Stars and Planets, Astronomy — Atlantean at 11:05 pm on Friday, March 3, 2006

Simulating in a laboratory the condition of pressure, temperature, stress and grain size that mimic those in the deep interiors of giant icy moons in the outer solar system, a team of scientists have demonstrated a new form of "creep" in high-pressure ice flows.

High-pressure ice is a major component of icy moons such as Ganymede and Callisto of Jupiter, Saturn's Titan and Neptune's Triton. Ganymede, Callisto and Titan are 1.5 times the size of our moon, and Triton is roughly the same mass as our moon. WORMHOLE»

Comments (0)

Make donations with PayPal - it's fast, free and secure!

- **News Video**

  National News
  World News
  People & Culture
  Space News
  Science News
  Tech News

- **Navigation**
  - Home Page

- **Allies & Friends**
  - All the Best Magazines at The Magazine Rack
  - Blue Sky Train
  - del.icio.us
  - Great Gift Ideas for St. Patrick's Day
  - Nuk3.com
  - Texas-Explorer.com
  - Universe Today

- **Books**
  - Amatuer Astronomy
  - Astronomy
  - Space Exploration

- **Archives:**
  - March 2006
  - January 2006

- **Pages**
  - About
  - 2005 Was the Warmest Year in a Century
  - What's Up This Week - January 23 - January 29, 2006
  - It's Far, It's Small, It's Cool: It's an Icy Exoplanet!
  - First Man : The Life of Neil A. Armstrong
  - Help Support Stars and Planets

- **Meta:**

- Register
- Login
- RSS
- Comments RSS
- Valid XHTML
- XFN
- WP

- **Search:**

Search