News by Subject

SPACE & PLANETARY

Key: Meeting Journal Funder Dissertation

Public Release: 12-Mar-2010

Tropical Storm Tomas approaching Nadi this weekend

Tropical Storm Tomas is on a southern track in the South Pacific Ocean, and residents of Nadi, Fiji will be watching it as it approaches the eastern side of the island late this weekend. A tropical cyclone alert is in effect for all of Fiji this weekend.

NASA

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Public Release: 12-Mar-2010

NASA's Aqua Satellite shows strong convection in Tropical Storm Ului

NASA's Aqua satellite flew over Tropical Storm Ului during the morning hours (Eastern Time) on March 12 and noticed a large area of strong convection in the storm's center, indicating strengthening.

NASA

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Public Release: 12-Mar-2010

GOES-12 captures south Atlantic Tropical Storm 90Q far from Argentina's coast

The second–ever known tropical cyclone in the South Atlantic Ocean can't escape satellite eyes, and today, the Geostationary Operational Environmental Satellite, GOES-12 captured a visible image of Tropical Storm 90Q now located off the coast of Argentina.

NASA

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Nature

Foiling an attack on general relativity

In an attempt to explain away invisible dark matter and dark energy, some theorists have offered modified theories of gravity that try to improve on Einstein's General Theory of Relativity. A new study based on the Sloan Digital Sky Survey and inspired by the work of Lawrence Berkeley National Laboratory cosmologist Uros Seljak indicates that at least one of these alternate theories is wrong.

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Nature
Princeton scientists say Einstein's theory applies beyond the solar system
A team led by Princeton University scientists has tested Albert Einstein's theory of general relativity to see if it holds true at cosmic scales. And, after two years of analyzing astronomical data, the scientists have concluded that Einstein's theory, which describes the interplay between gravity, space and time, works as well in vast distances as in more local regions of space.

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Public Release: 12-Mar-2010
Geophysical Research Letters
Lost into space
Space physicists from the University of Leicester are part of an international team that has identified the impact of the Sun on Mars' atmosphere.

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Public Release: 11-Mar-2010
Proposed mission would return sample from asteroid 'time capsule'
Meet asteroid 1999 RQ36, a chunk of rock and dust about 1,900 feet in diameter that could tell us how the solar system was born, and perhaps, shed light on how life began. It also might hit us someday.
NASA

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Public Release: 11-Mar-2010
3 FASTSAT instruments pass tests
The outer layers of Earth's atmosphere hold many secrets yet to be uncovered and three scientific instruments will fly soon on the FASTSAT-HSV01 satellite and seek to uncover them to benefit us here on Earth. Known as MINI-ME, PISA and TTI, these instruments recently passed a series of important final tests to prove their readiness for spaceflight.
NASA, USNA, USAF

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Public Release: 11-Mar-2010
Second only south Atlantic tropical storm: 90Q, moving away from Brazil
Tropical Storm 90Q is the second known tropical cyclone to form in the cooler South Atlantic Ocean, and two NASA satellites confirm it is now moving away from Brazil's coast. The first tropical cyclone ever seen in recorded history in the Southern Atlantic was called "Catarina" in 2004.
NASA

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Public Release: 11-Mar-2010
Tropical Storm Tomas calls for alerts in south Pacific
System 97P was looking pretty impressive on NASA satellite imagery early today, March 11, and by 10 a.m. ET, it strengthened into Tropical Storm Tomas.

NASA

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Public Release: 11-Mar-2010

Hubert's remnants still raining on southern Madagascar

Hubert may not be a tropical storm now that it has made landfall in southeastern Madagascar, but it's still a formidable and large storm system. NASA's Aqua satellite revealed that there are still some very high, strong thunderstorms in Hubert's remnants as it continues to bring rains and gusty winds to southeast and south-central Madagascar.

NASA

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Public Release: 11-Mar-2010

Journal of Geophysical Research

Shocking recipe for making killer electrons

Take a bunch of fast-moving electrons, place them in orbit and then hit them with the shock waves from a solar storm. What do you get? Killer electrons. That's the shocking recipe revealed by ESA's Cluster mission.

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Public Release: 10-Mar-2010

Low strengthens into Hubert, making landfall in Madagascar

The low that forecasters were watching for development yesterday, March 9, strengthened into Tropical Storm Hubert, and is already making landfall in eastern Madagascar.

NASA

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Public Release: 10-Mar-2010

90Q: A curious short-lived 'tropical' cyclone in the southern Atlantic

Tropical cyclones typically don't form in the Southern Atlantic because the waters are usually too cool. However, forecasters at the Naval Research Laboratory noted that a low pressure system off the coast of Brazil appeared to have tropical storm-force winds yesterday.

NASA

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Public Release: 10-Mar-2010

Astrophysical Journal Letters

Mysterious cosmic 'dark flow' tracked deeper into universe

Distant galaxy clusters mysteriously stream at a million miles per hour along a path roughly centered on the southern constellations Centaurus and Hydra. A new study led by Alexander Kashlinsky at NASA's Goddard Space Flight Center in Greenbelt, Md., tracks this collective motion -- dubbed the "dark flow" -- to twice the distance originally reported.

NASA, University of Salamanca

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Public Release: 10-Mar-2010

Nature

Galaxy study validates general relativity on cosmic scale, existence of dark matter

While general relativity describes well the behavior of the solar system, Einstein's theory of gravity and spacetime has not been tested on cosmological scales. Now, a team that includes UC Berkeley physicist Uros Seljak has analyzed data on 70,000 galaxies to show that the theory is so far the best description of the universe, at least out to 3.5 billion light years from Earth. Specifically, theories without dark matter do not fit the observations.

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Public Release: 9-Mar-2010

Tropical cyclone formation likely near Madagascar

Forecasters are watching a low pressure area located off the east coast of Madagascar that appears ripe for development in the Southern Indian Ocean. If it becomes a tropical storm, it would be named Hubert.

NASA

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Public Release: 9-Mar-2010

Monthly Notices of the Royal Astronomical Society

Scientists discover 'catastrophic event' behind the halt of star birth in early galaxy formation

Scientists have found evidence of a catastrophic event they believe was responsible for halting the birth of stars in a galaxy in the early universe.

Royal Society, Royal Astronomical Society

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Astrophysical Journal Letters

Most extreme white dwarf binary system found with orbit of just 5 minutes

An international team of astronomers, including Professor Tom Marsh and Dr. Danny Steeghs from the University of Warwick, have shown that the two stars in the binary HM Cancri definitely revolve around each other in a mere 5.4 minutes. This makes HM Cancri the binary star with by far the shortest known orbital period. It is also the smallest known binary.

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Public Release: 8-Mar-2010

Geophysical Research Letters

AGU Journal highlights -- March 8, 2010

Featured in this release are research papers on the following topics: Lack of arches doubled Arctic strait's sea-ice loss; Solar wind pulses help blow away Martian atmosphere; Patterns of colored organic matter reveal ocean features; Accurately estimating climate feedbacks; Ocean acidification: Simply predicting key depths; and Deep-ocean billows observed.

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Public Release: 4-Mar-2010

Phobos flyby success

Mars Express encountered Phobos last night, smoothly skimming past at just 67 km, the closest any manmade object has ever approached Mars' enigmatic moon. The data collected could help unlock the origin of not just Phobos but other "second generation" moons.

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Bully galaxy rules the neighborhood

In general, galaxies can be thought of as "social" -- hanging out in groups and frequently interacting. However, this recent NASA/ESA Hubble Space Telescope image highlights how some galaxies appear to be hungry loners. These cosmic oddities have set astronomers on the "case of the missing neighbor galaxies."

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Public Release: 4-Mar-2010

Science

Asteroid killed off the dinosaurs, says international scientific panel

The Cretaceous-Tertiary mass extinction, which wiped out the dinosaurs and more than half of species on Earth, was caused by an asteroid colliding with Earth and not massive volcanic activity, according to a comprehensive review of all the available evidence, published today in the journal Science.

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Science

Oldest measurement of Earth's magnetic field reveals battle between sun and Earth for our atmosphere

Scientists at the University of Rochester have discovered that the Earth's magnetic field 3.5 billion years ago was only half as strong as it is today, and that this weakness, coupled with a strong wind of energetic particles from the young sun, likely stripped water from the early Earth's atmosphere.

National Science Foundation

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Public Release: 4-Mar-2010

Science

Experts reaffirm asteroid impact caused mass extinction

Responding to challenges to the hypothesis that an asteroid impact caused a mass extinction on Earth 65 million years, a panel of 41 scientists re-analyzed data and provided new evidence, concluding that an impact in Mexico was indeed the cause of the mass extinction.

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