



The Starry Messenger

THE BIGGEST & BEST IN THE METROPLEX!

Pink Floyd Shows Coming in December!



This holiday season, the Planetarium will be bringing in 3 new entertainment shows; Pink Floyd's *Dark Side of the Moon*, *The Wall*, and *Wish You Were Here*. Amazing visuals

and animations will bring these classic albums to life in entertainment shows reminiscent of a 60's laser light show.

Our holiday schedule will also include our other entertainment shows, SpacePark 360, Holiday Music Magic, and Season of Light. Look for our complete holiday show schedule in the coming weeks.

Earth's Daughter New Exhibit in the Atrium



Discover how the Moon was formed in the Planetarium's new exhibit, *Earth's Daughter*. This wonderful addition to the atrium is on loan from NASA's Lunar

Science Institute through mid-January.

Our Moon's story is intriguing; it began with a brutal process. Early in our solar system's history, with the debris of formation still littering space, Earth was struck by a small planet!

Around 4.5 billion years ago, a large object - about half as wide as Earth - collided with our world. The off-center cosmic smash-up increased Earth's spin,

Great Gifts Available in Our Gift Shop



Start your holiday shopping early with the Planetarium gift shop. Keep yourself and others organized in 2011 with our beautiful

Planetarium calendars. These calendars feature images of the Planetarium at its best. Enjoy photos of the interior of the theater and the Lunar Excursion Module, Saturn and the Ring Nebula. Or if you love architecture, enjoy the amazing photos of the Chemistry Physics Building.

These calendars are available now for just \$15 plus tax. Call or [email](#) the Planetarium to order yours 817-272-1183.

Our gift shop also has great telescopes for all abilities and price ranges.

\$2 Movie Schedule November



More great movies are available this month for our \$2 movie schedule. Check it out!

Iron Man 2 -
Wednesday, November 3rd at 5:30
Friday, November 5th at 5:30
Saturday, November 6th at 2:30

How to Train Your Dragon -
Wednesday, November 10th at 6:30
Friday, November 12th at 5:30
Saturday, November 13th at 2:30

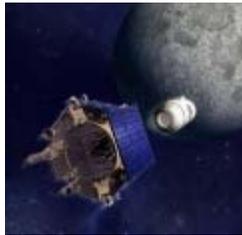
Clash of the Titans -
Wednesday, November 17th at 5:30
Friday, November 19th at 5:30
Saturday, November 20th at 2:30

and its energy disintegrated the impacting object, melted Earth's outer layers, and flung debris into orbit around Earth.

This material formed a ring of gas, dust, and molten rock around Earth.

In less than a hundred years - an incredibly short time for the formation of an entire world - this debris clumped, growing larger and larger to form our Moon!

Lunar Impact Uncovered More Than Just Moon Water



Nearly a year after announcing the discovery of water molecules on the moon, scientists have revealed new data uncovered by NASA's Lunar CRater

Observation and Sensing Satellite, or LCROSS, and Lunar Reconnaissance Orbiter, or LRO—and it's more than just water.

The missions found evidence that lunar soil within shadowy craters is rich in useful materials. Moreover, the moon appears to be chemically active and has a full-fledged water cycle. Scientists also confirmed that 'moon water' was in the form of mostly pure ice crystals in some places.

These results are featured in six papers published in the Oct. 22 issue of *Science*. The twin impacts of LCROSS and a companion rocket stage in the moon's Cabeus crater on Oct. 9, 2009, lifted a plume of material that might not have seen direct sunlight for billions of years. As the plume traveled nearly 10 miles above the crater's rim, instruments aboard LCROSS and LRO made observations of the crater and debris and vapor clouds. After the impacts, grains of mostly pure water ice were lofted into the sunlight in the vacuum of space.

"Seeing mostly pure water ice grains in the plume means water ice was somehow

Toy Story 3 -

Wednesday, November 24th at 5:30

Friday, November 26th at 5:30

Saturday, November 27th at 2:30

Keep your eyes on our schedule each month so you don't miss any of the fun titles showing at the Planetarium.

Year of the Solar System



It is with great excitement that NASA's Planetary Science Division announces the Year of the Solar System, and the

Planetarium is inviting you to help participate.

Spanning a Martian Year—23 months—the Year of the Solar System celebrates the amazing discoveries of numerous NASA missions as they explore our planetary neighbors and probe the outer edges of our Solar System. New missions will further explore Jupiter, the Earth's Moon, and Mars. Others will encounter comets and asteroids, and continue to decipher the mysteries of the Sun, Mercury, Saturn, and our home planet, Earth. It is an unprecedented time in planetary sciences as we learn about new worlds and make new discoveries!

Each month from October 2010 to August 2012 will highlight different aspects of our Solar System—its formation, volcanism, gravity, ice, life elsewhere?—weaving together activities, resources, and ideas that teachers, clubs, and organizations can use to engage audiences.

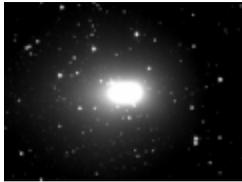
Visit the [Year of the Solar System](#) website for

- Educational materials for classroom teachers, organizations, clubs, and others interested in participating
- Night-sky viewing events and

delivered to the moon in the past, or chemical processes have been causing ice to accumulate in large quantities," said Anthony Colaprete, LCROSS project scientist and principal investigator at NASA's Ames Research Center.

Find out more at the [NASA Science News](#) site.

Deep Impact Mission Goes to Comet Hartley 2



Back on March 15, 1986, while observing in Siding Spring, Australia, Malcom Hartley discovered the comet that would officially be designated Comet 103P/Hartley2 (Hartley 2). On November 4th, 2010, NASA's EPOXI mission, the extended mission of the Deep Impact Spacecraft, will capture close-up images and other data as it flies within 750 kilometers (460 miles) of the comet's nucleus, estimated to be about 1 kilometer (0.6 miles) in diameter.

This encounter follows a celebrated primary mission for Deep Impact, during which it fired an instrumented projectile at Comet Tempel 1 to excavate a crater on July 4, 2005. Its extended mission, EPOXI, combines two objectives -- the Deep Impact Extended Investigation (DIXI), which focuses on the Hartley 2 flyby, and the Extrasolar Planet Observation and Characterization (EPOCh), which used one of the spacecraft's telescopic cameras to search for planets orbiting other stars. In addition, engineers have used the spacecraft to flight-test new protocols for space communications.

As EPOXI approached the comet a series of images was taken and combined into this great [animation](#). Take a look!

- mission milestones
- Featured activities
- Recommended resources
- People profiles
- Year of the Solar System updates
- Free downloadable promotional materials (bookmarks, fliers, calendar of events)

Support the Planetarium: Become a Member!



Memberships are a great way to get involved with the Planetarium and help

support our mission, and it comes with great benefits!

Benefits Include:

- Free tickets to the Planetarium
- Discount to our Star Store gift shop
- Free Star maps
- Invitation to our annual "Reach for the Stars" event

Membership Categories:

Star - \$40 - Receive 2 FREE tickets to each new show.

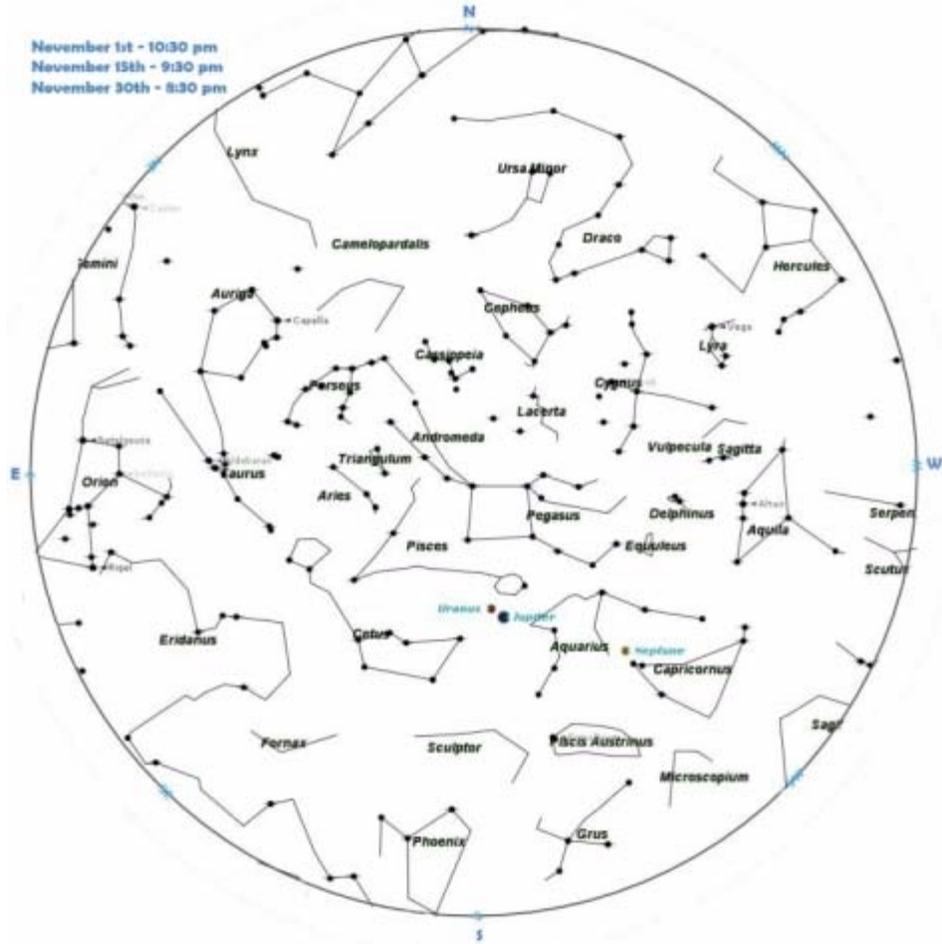
Solar System - \$60 - Receive 4 FREE tickets to each new show.

Star Cluster - \$100 - Receive 6 FREE tickets to each new show.

Galaxy - \$1000 - Receive 8 FREE tickets to each new show, plus a personalized chair in the Planetarium!

[Apply](#) online today! Memberships also make great gifts, so consider giving one to friends and family.

November 1st - 10:30 pm
November 15th - 9:30 pm
November 30th - 8:30 pm



Planetarium at UT Arlington

700 Planetarium Place | Arlington, TX 76019 | 817-272-0123

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Got this as a forward? [Sign up](#) to receive our future emails.

