



# The Starry Messenger

THE BIGGEST & BEST IN THE METROPLEX!



## Astronomy Day

Join us for Astronomy Day on Saturday, October 27<sup>th</sup> from 4:30 – 10:00 pm. We'll have discounted planetarium shows, free demonstrations, handouts, lectures, raffles and more.

Meet members of the National Space Society of North Texas, the Texas Astronomical Society, and the Fort Worth Astronomical Society. Weather permitting, telescopes will be set up to look at the Sun, Moon and other celestial objects throughout the day.

### Schedule of Planetarium shows:

5:00 – Experience the Aurora

7:00 – Texas Stargazing

9:00 – We Are Astronomers

9:30 – Pink Floyd



## New Comet Discovered

If astronomers' early predictions hold true, the holidays next year may hold a glowing gift for stargazers—a superbright [comet](#), just discovered streaking near Saturn.

Even with powerful telescopes, comet 2012 S1 (ISON) is now just a faint glow in the constellation Cancer. But the ball of ice and rocks might become visible to the naked eye for a few months in late 2013 and early 2014—perhaps outshining the moon, astronomers say.

The comet is already remarkably bright, given how far it is from the sun, astronomer Raminder Singh Samra said. What's more, 2012 S1 seems to be following the path of the Great Comet of 1680, considered one of the most spectacular ever seen from Earth.

"If it lives up to expectations, this comet may be one of the brightest in history," said Samra, of the [H.R.](#)



Guests look at the Moon on International Observe the Moon Night, September 22<sup>nd</sup>.

[MacMillan Space Centre](#) in Vancouver, Canada.

So what makes a comet a showstopper? A lot depends on how much gas and dust is blasted off the central core of ice and rocks. The bigger the resulting cloud and tail, the more reflective the body may be.

Find out more in the [article](#), published by [National Geographic](#).



## Martian Rivers

NASA's Curiosity rover mission has found evidence a stream once ran vigorously across the area on Mars where the rover is driving. There is earlier evidence for the presence of water on Mars, but this evidence -- images of rocks containing ancient streambed gravels -- is the first of its kind.

Scientists are studying the images of stones cemented into a layer of conglomerate rock. The sizes and shapes of stones offer clues to the speed and distance of a long-ago stream's flow.

"From the size of gravels it carried, we can interpret the water was moving about 3 feet per second, with a depth somewhere between ankle and hip deep," said Curiosity science co-investigator William Dietrich of the University of California, Berkeley. "Plenty of papers have been written about channels on Mars with many different hypotheses about the flows in them. This is the first time we're actually seeing water-transported gravel on Mars. This is a transition from speculation about the size of



## SpaceX Headed For ISS

SpaceX and NASA continue to prepare for the company's first Commercial Resupply Services, or CRS, mission to the International Space Station aboard the Dragon capsule.

NASA managers, SpaceX officials and international partner representatives have set Sunday, Oct. 7, as the target launch date for the first contracted cargo resupply flight to the International Space Station under NASA's CRS contract.

Launch of the Falcon 9 rocket and its Dragon cargo capsule is set for 7:34 p.m. CDT from Space Launch Complex 40 at Cape Canaveral Air Force Station in Florida. A back up launch opportunity is available on Oct. 8.

The SpaceX CRS contract with NASA provides for 12 cargo resupply missions to the station through 2015, the first of which is targeted to launch October 7, 2012.

streambed material to direct observation of it."

The finding site lies between the north rim of Gale Crater and the base of Mount Sharp, a mountain inside the crater. Earlier imaging of the region from Mars orbit allows for additional interpretation of the gravel-bearing conglomerate. The imagery shows an alluvial fan of material washed down from the rim, streaked by many apparent channels, sitting uphill of the new finds.

Read [more](#) about this exciting new find, and see the [images](#) sent back by Curiosity on [NASA's website](#).

SpaceX became the first private company to berth a spacecraft with the space station in 2012.

Find the latest [SpaceX updates](#) from [NASA](#).



*Dragon docks with the International Space Station in May 2012*

