



The Starry Messenger

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Astronomy Day is October 26th

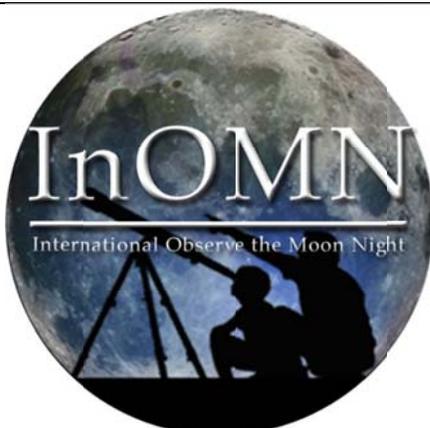
Join us for our annual Astronomy Day event on Saturday, October 26th from 2:00 p.m. – 10:00 p.m. The day will be full with discounted Planetarium shows, free lectures by local astronomers and space enthusiasts, free handouts, telescopes pointed to the Sun (with proper solar filters of course), Moon, visible planets and more! Meet the members of the Texas Astronomical Society, Fort Worth Astronomical Society, National Space Society of North Texas and other local astronomy clubs. Come for just an hour, or stay for the whole event! The event is free to attend and no registration is required.

Planetarium Show Schedule:

- 1:00 – Secret of the Cardboard Rocket
- 2:00 – Cosmic Colors
- 4:00 – Astronaut
- 6:00 – We Are Astronomers
- 7:00 – Texas Stargazing
- 9:00 – Pink Floyd

Free Lecture Schedule:

- 3:00 – SpaceX and the Commercial Spaceflight Industry
- 5:00 – Moon U.
- 8:00 – Introducing NASA's Space Launch System (SLS)



International Observe the Moon Night

Join us on Saturday, October 12th for International Observe the Moon Night. We'll have a telescope available to view our nearest celestial neighbor from 6:00 – 7:00 p.m. Be sure to stop on by and take a look. Ken Murphy, President of the Moon Society, will also be around to teach you more about the Moon, in Moon U.

International Observe the Moon Night (InOMN) is an annual event that is dedicated to encouraging people to 'look up' and take notice of our nearest neighbor, the Moon. From looking at the Moon with a naked eye to using the most sensitive telescope, every year on the same day, people from around the world hold events and activities that celebrate our Moon.

Save The Night

It's dark out there at night. But maybe that's good for you and everything around you.

Nationally respected conservationists Paul Bogard, author of *The End of Night: Searching for Natural Darkness in an Age of Artificial Light*, and Green Earth Lighting owner Cindy Luongo Cassidy will examine the impact of nighttime artificial light on physical, mental and spiritual health at an Arlington Conservation Council (ACC) workshop and lecture Wednesday, Nov. 6, at the Planetarium at UT Arlington.

Cassidy will lead the 5-6:45 p.m. lighting assessment workshop featuring a walk-around critique of installed lighting on the UTA campus, followed by the Planetarium show "The November Night Sky." The Planetarium is in the Chemistry and Physics Building; the workshop will be in CPB 303, the conference room above the Planetarium.

At 7:15 Cassidy and Bogard will present "Save the Night," a lecture with Q&A. Bogard will sign his book afterward.

The workshop and lecture are free, but seating is limited for the workshop. Register at jburgenlecture@acctexas.org. Directions to the Planetarium and a parking pass will be returned with registration confirmation.



Cassini Spacecraft Finds Plastic in Space

NASA's Cassini spacecraft has detected propylene, a



It's Official: Voyager 1 First Earthly Craft to Leave Solar System

NASA says Voyager crossed the boundary of the

chemical used to make food-storage containers, car bumpers and other consumer products, on Saturn's moon Titan.

This is the first definitive detection of the plastic ingredient on any moon or planet, other than Earth.

A small amount of propylene was identified in Titan's lower atmosphere by Cassini's Composite Infrared Spectrometer (CIRS). This instrument measures the infrared light, or heat radiation, emitted from Saturn and its moons in much the same way our hands feel the warmth of a fire.

Propylene is the first molecule to be discovered on Titan using CIRS. By isolating the same signal at various altitudes within the lower atmosphere, researchers identified the chemical with a high degree of confidence. Details are presented in a paper in the Sept. 30 edition of the *Astrophysical Journal Letters*.

"This chemical is all around us in everyday life, strung together in long chains to form a plastic called polypropylene," said Conor Nixon, a planetary scientist at NASA's Goddard Space Flight Center in Greenbelt, Md., and lead author of the paper. "That plastic container at the grocery store with the recycling code 5 on the bottom — that's polypropylene."

Read [more](#) about this amazing new discovery at EarthSky.org.

heliosphere, or sphere of our sun's influence, a year ago.

NASA's Voyager 1 spacecraft officially is the first human-made object to venture into interstellar space. The 36-year-old probe is about 12 billion miles (19 billion kilometers) from our sun.

New and unexpected data indicate Voyager 1 has been traveling for about one year through plasma, or ionized gas, present in the space between stars. Voyager is in a transitional region immediately outside the solar bubble, where some effects from our sun are still evident. A report on the analysis of this new data, an effort led by Don Gurnett and the plasma wave science team at the University of Iowa, Iowa City, is published in the [September 12] edition of the journal *Science*.

"Now that we have new, key data, we believe this is mankind's historic leap into interstellar space," said Ed Stone, Voyager project scientist based at the California Institute of Technology, Pasadena. "The Voyager team needed time to analyze those observations and make sense of them. But we can now answer the question we've all been asking — 'Are we there yet?' Yes, we are."

Discover [more](#), including the sounds of interstellar space, at EarthSky.org.