



Fall Schedule

Our Fall schedule is now available! It will be effective August 31st – December 2nd, 2012. We have lots of great shows, so come back often!

Thursdays

6:00 – Black Holes

Fridays

6:00 – Experience the Aurora

Saturdays

1:00 – Secret of the Cardboard Rocket

2:30 – Black Holes

5:30 – Experience the Aurora

7:00 – Pink Floyd

Sundays

1:30 - Violent Universe

2:30 – Spacepark 360



EXPERIENCE THE AURORA

Experience the Aurora

Join us as we *Experience the Aurora*, in our newest planetarium show! This brand new show will be part of our fall schedule playing every Friday at 6:00 and Saturday at 5:30.

Over seven months in the Arctic Circle, Evans and Sutherland crews captured time-lapse images of the Aurora Borealis with high resolution digital SLR cameras outfitted with fisheye lenses. The results are spectacular! For the first time, the aurora has been captured as it was meant to be experienced, as a display that covers the entire sky.

This immersive show shares the science behind the aurora and tells the story of our quest to find and photograph the aurora for wraparound display in full-dome theaters.

We love to see your space themed pictures! Share yours on [Facebook](#).



Star trails in Wisconsin. Share your pics with us too!



International Observe the Moon Night

Join the Planetarium and the Texas Astronomical Society for a night of moon viewing on Saturday, September 22nd at 7:00 pm (weather permitting). Telescopes will be available for everyone's enjoyment along with Moon activities and handouts. This international celebration is free and open to the public!

The International Observe the Moon Night Team consists of scientists, educators, and Moon enthusiasts from government, non-profit organizations, and businesses throughout the United States and across the globe. We believe in the inspirational power of the Moon — a celestial body that has influenced human lives since the dawn of time. International Observe the Moon Night (InOMN) has created the opportunity for people to take notice of the Moon's beauty and share that experience with one another. Through InOMN, we hope to instill in the public a sense of wonderment and curiosity about our Moon.



Neil Armstrong, First Man on the Moon, Dies

Neil Armstrong, the first man to walk on the moon during the 1969 Apollo 11 mission, has died, following complications resulting from cardiovascular procedures. He was 82.

Armstrong's words, "That is one small step for (a) man, one giant leap for mankind," spoken on July 20, 1969, as he became the first person ever to step onto another planetary body, instantly became a part of history.

Those few words from the Sea of Tranquility were the climactic fulfillment of the efforts and hopes of millions of people and the expenditure of billions of dollars. A plaque on one of the lander's legs that concluded "We came in peace for all mankind," further emphasized that Armstrong and fellow astronaut Edwin "Buzz" Aldrin were there as representatives of all humans.

In a 2001 oral history interview, Armstrong credited those behind the scenes for the mission's success: "When you have hundreds of thousands

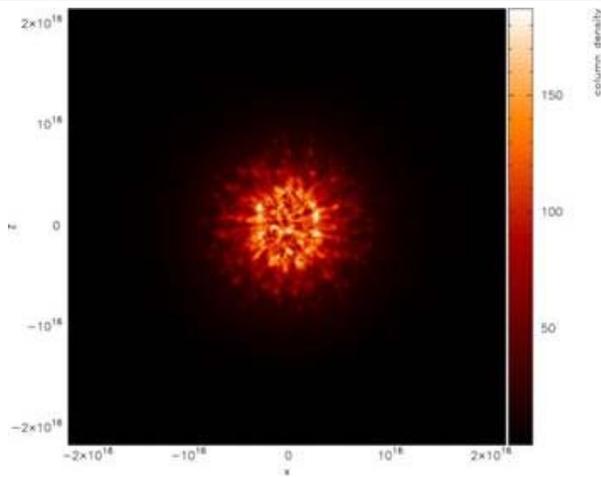
More information about InOMN can be found [here](#).



Image of the Moon by our Program Coordinator, Amy Barraclough. Share your photos with us too on our [Facebook Page](#).

of people all doing their job a little better than they have to, you get an improvement in performance. And that's the only reason we could have pulled this whole thing off."

Read more about Neil Armstrong's [life](#) and see a [photo gallery](#) of Armstrong on NASA's website.



Supernovas in the Dome

The Planetarium has partnered with UTA Astrophysicist Dr. Sangwook Park to create realistic supernova explosions for the dome. Based on these 3-D simulations, he will be looking for promising solutions for Chandra X-ray observations of some prominent supernova remnants such as Cassiopeia A and G292.0+1.8.

Supernova explosions are a 3-D phenomenon involving various asymmetries, both in the explosion itself and in the ambient medium. One of the main shortfalls in previous theoretical studies of supernova is their 1-D or 2-D nature. Also, previous works focused primarily on the explosion itself, and largely ignored the evolution of the blast wave shock into the ambient medium for time periods of ~1000 years or longer. Both of these aspects are critically important to interpret the actual observational data of the remnants of supernova explosions.

"The main goal of this project is to perform 3-D



Dawn Headed to Ceres

NASA's Dawn spacecraft is on track to become the first probe to orbit and study two distant solar system destinations, to help scientists answer questions about the formation of our solar system. The spacecraft is scheduled to leave the giant asteroid Vesta on September 4 to start its two-and-a-half-year journey to the dwarf planet Ceres.

Dawn began its 3 billion mile odyssey to explore the two most massive objects in the main asteroid belt in 2007. Dawn arrived at Vesta in July 2011 and will reach Ceres in early 2015. Dawn's targets represent two icons of the asteroid belt that have been witness to much of our solar system's history.

To make its escape from Vesta, the spacecraft will spiral away as gently as it arrived, using a special, hyper-efficient system called ion propulsion. Dawn's ion propulsion system uses electricity to ionize xenon to generate thrust. The 12-inch-wide ion thrusters provide less power than conventional engines, but can maintain thrust for months at a time.

numerical simulations of various supernova explosions and their evolution out to several thousand years after the explosion. Our simulations will test various scenarios of supernova explosions and environments assuming a broad range of the progenitor star's mass and the explosion energy, different explosion asymmetries and various environmental densities and asymmetries," says Dr. Park.

"Thrust is engaged, and we are now climbing away from Vesta atop a blue-green pillar of xenon ions," said Marc Rayman, Dawn's chief engineer and mission director, at NASA's Jet Propulsion Laboratory in Pasadena, California. "We are feeling somewhat wistful about concluding a fantastically productive and exciting exploration of Vesta, but now have our sights set on dwarf planet Ceres."

Read more about the mission on NASA's [website](#).