HLC Accreditation Evidence

Title: Barton Planetarium

Office of Origin: Vice President of Instruction

Barton Planetarium to ‘re-boot’ with all-new technology

April 16, 2014
Story by Brandon Steinert

The Barton Community College Planetarium is getting a “re-boot,” as the staff is calling it.

During the re-boot, the 1960s technology previously in use will be on display, then lowered into its housing to make way for a high-definition projector, using a series of precisely curved mirrors to proportionally project the image onto the Planetarium's 365-degree dome.

The re-boot will be a series of open-house events on Thursday, April 24; Friday, April 25; and Sunday, April 27, during which the public is invited to enjoy short educational movies and tours of the night sky. The movies and star tours will be on a half hour rotation.

Astronomy Instructor Tim Folkerts said he’s ecstatic about the update and what it means for Barton and the surrounding communities.

“After 40 years, it was time for some major upgrades to bring us into the 21st century,” he said. “The upgrade will give us new flexibility in how we can use the facility. The Planetarium now becomes a digital dome theater. We can see the night skies in whole new ways, or even fly to the moon to watch an eclipse. We can also show a wide variety of educational and entertaining movies that appeal to people of all ages.

“Science and learning should be fun and interesting. This upgrade will provide some ‘wow’ factor to the facility and hopefully get more people excited about the universe around them.”

The new, improved planetarium will provide many new capabilities for a diverse range of groups to take advantage of, including:

- **Astronomy Class** will be able to study how the sun, stars, planets and moons move from day-to-day, month-to-month, and year-to-year.
- **School Field Trips** for K-12 students can expand on ideas learned in the classroom. We have a series of short lessons for K-8 that can be tailored to meet the needs of specific classes.
- **Star Tours** will introduce the public to the wonders of the night sky in each season. We can zoom in on specific constellations, planets and galaxies for an up-close look.
- **Educational Videos** are available for a variety of topics, many of which were designed to display proportionally on the dome, providing an immersive experience.
- **Our 60-Seat Theater** can show nearly any movie, PowerPoint presentation or computer-generated image.

Planetarium | Shows

Check out shows available through the Barton Planetarium!

Spring Schedule

Check out the Barton Planetarium for themed presentations this fall! Shows will run from 7-8 p.m. (full-dome movie from 7-7:30 p.m., live presentation from 7:30-8 p.m.) and will vary in topics, including a tour of the night skies, hands-on activity, or a look outside at the actual skies. See below for the complete schedule.

April 18 - Exoplanets: Worlds Around Other Stars
April 25 - Collision: Objects that have (or might) hit the Earth
May 2 - The Big Bang

Show Descriptions

Back To The Moon For Good

Immerse yourself in a race to the Moon 40 years after the historic Apollo landings.

Learn about the history of lunar exploration, and the Moon's resources. Discover what humanity's future on the Moon might hold. See how a competition among privately funded international teams is ushering in a new era of lunar exploration.

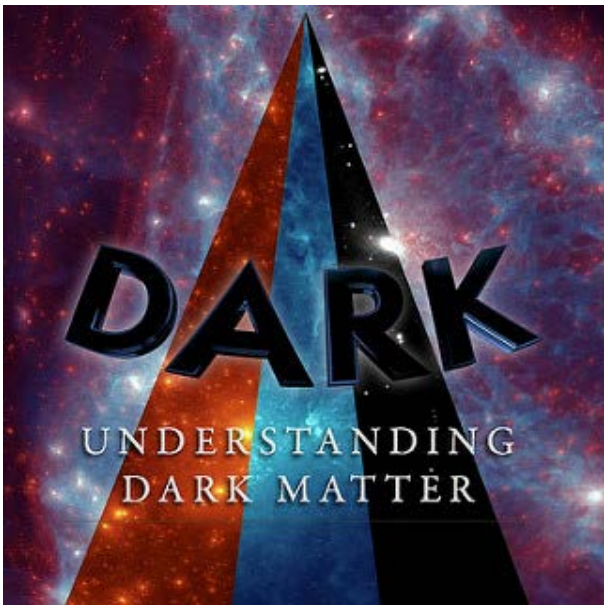
Narrated by Tim Allen, Back To The Moon For Good presents

the Google Lunar XPRIZE, and the personal stories of competition and collaboration it inspires.

Time: 25 Minutes

Target Audience: 10 – Adult

DARK: The Movie



DARK is a full-dome movie that explains and explores the nature of dark matter, the missing 80% of the mass of the Universe.

The search for dark matter is the most pressing astrophysical problem of our time – the solution to which will help us understand why the Universe is as it is, where it came from, and how it has evolved over billions of years – the unimaginable depths of deep time, of which a human life is but a flickering instant. But in that instant, we can grasp its immensity and, through science, we can attempt to understand it.

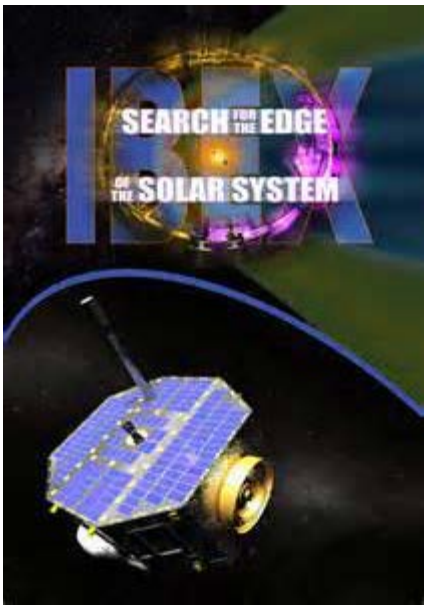
Time: 20 Min

Target Audience: 14 – Adult

IBEX: Search for the Edge of the Solar System

Join scientists who are investigating the boundary between our Solar System and the rest of our galaxy in IBEX: Search for the Edge of the Solar System.

Designed for visitors with an appreciation for the challenges of space science and a desire to learn more about science research, the show follows the creation of NASA's Interstellar Boundary Explorer (IBEX). Audiences will get an in-depth look at the mission and how IBEX is collecting high-speed atoms



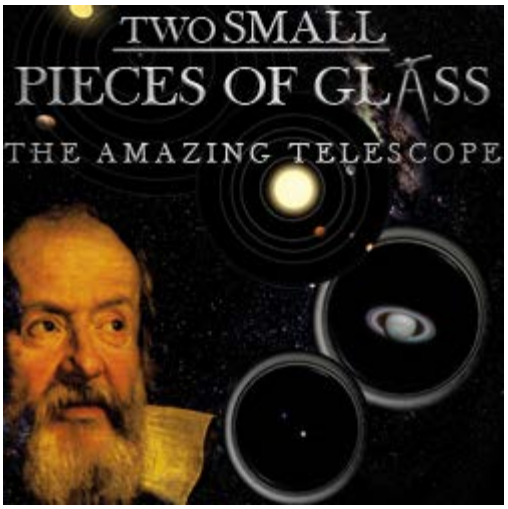
to create a map of our Solar System's boundary.

Narrated by two inquisitive teenagers, audiences will hear from the scientists and engineers that developed the IBEX mission and created the spacecraft, and get the latest updates on the mission's discoveries.

Time: 27 Minutes

Target Audience: 10 – Adult

Two Small Pieces of Glass: The Amazing Telescope



While attending a local star party, two teenage students learn how the telescope has helped us understand our place in space and how telescopes continue to expand our understanding of the Universe. Their conversation with a local astronomer enlightens them on the history of the telescope and the discoveries these wonderful tools have made. The students see how telescopes work and how the largest observatories in the world use these instruments to explore the mysteries of the universe.

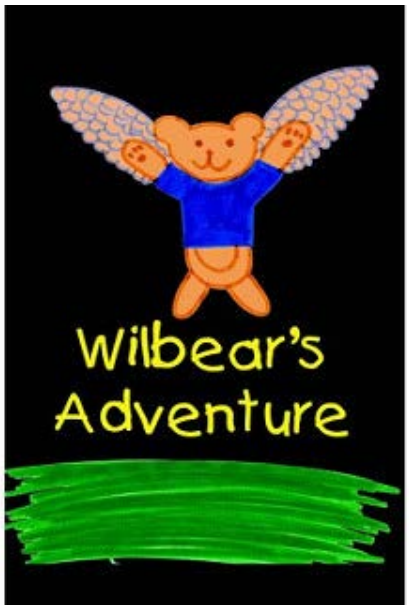
While looking through the astronomer's telescope, the students, along with the planetarium audience, explore the Galilean Moons, Saturn's rings, and spiral structure of galaxies.

Time: 25 Minutes

Target Audience: 10 – Adult

Wilbear's Adventure

Wilbear is a young teddy bear who has always been fascinated by flight. When his Grandpa comes to visit, Wilbear learns about the history of flight – especially his hero Wilbur Wright. Along the way, Wilbear learns about mythology and sees a few winged constellations. Finally, Wilbear visits an airport and gets to see



all the different airplanes.

Time: 22 minutes

Target Audience: 3–8

Losing the Dark

Starry skies are a vanishing treasure because light pollution is washing away our view of the cosmos. It not only threatens astronomy, it disrupts wildlife, and affects human health. The yellow glows over cities and towns — seen so clearly from space — are testament to the billions spent in wasted energy from lighting up the sky.

Losing the Dark is a “public service announcement” planetarium show. It introduces and illustrates some of the issues regarding light pollution, and suggests three simple actions people can take to help mitigate it.

Time: 7 minutes

Target Audience: 10 – Adult

Live Shows

Tonight’s Skies - Learn about the stars, constellations, and planets visible in the night sky. Our digital projection system lets us explore in whole new ways, viewing the skies from any place and any time. This interactive show changes depending on the season and any current special celestial events.

Time: Variable from 20–60 minutes.

Up, Up, And Away - Take a journey as we leave Barton Community College and fly ever higher, learning about the scales of the universe. We will leave the familiar landscapes of Kansas, fly away from earth, beyond the solar system, through the Milky Way and onward to distant galaxies.