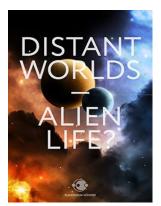


LearnSpace! Planetarium Shows

Children explore the solar system, distant galaxies, and new discoveries in our planetarium. Ignite the imagination and discover the past, present, and future of space exploration at one of our many full dome planetarium shows.

Investigate the Solar System, the Galaxy, and the Universe:



Distant Worlds Alien Life (2016) 52 minutes

This film investigates the conditions required for life, beginning with planets and moons in our Solar System and venturing out to some of the newly-discovered exoplanets orbiting other stars. Potentially habitable exoplanets are being discovered regularly - worlds that are not only very far away, but also strange and unfamiliar. What could life on these worlds look like? What are the chances of encountering intelligent life in the future and how might we detect it?



From Earth to the Universe (2015) 30 minutes

This stunning voyage through space and time conveys, through sparkling sights and sounds, the Universe revealed to us by science. Viewers can revel in the splendor of the worlds in the Solar System and our scorching Sun. *From Earth to the Universe* takes the audience out to the colorful birthplaces and burial grounds of stars, and still further out beyond the Milky Way to the unimaginable immensity of a myriad galaxies. Along the way, the audience will learn about the history of astronomy, the invention of the telescope, and today's giant telescopes that allow us to probe ever

deeper into the Universe.



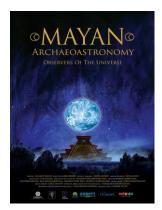


Journey to the Center of the Milky Way (2014) 6 minutes

What lies at the heart of our galaxy? For twenty years, ESO's Very Large Telescope and the Keck telescopes have observed the center of the Galaxy, looking at the motion of more than a hundred stars and identifying the position of an otherwise invisible object — the supermassive black hole at the center of our galaxy.

Embark on a Journey to the Center of the Milky Way and during seven minutes travel faster than light, from the driest place on Earth, the Atacama

Desert in Chile right to the center of our own galaxy, where a black hole is consuming anything that strays into its path. 84 million stars will appear in front of your eyes, each hiding mysteries waiting to be solved. Are there planets around them, perhaps with moons? Do they have water? Could they harbor life?



Mayan Archaeoastronomy: Observers of the Universe (2017) 20 minutes

Mayan Archaeoastronomy: Observers of the Universe is unique among planetarium shows, intertwining science and mythology to take the viewer on a poetic journey through how the Mayans have viewed and understood the Universe throughout their history. The visuals are stunning, giving the viewer the impression of being inside a beautifully stylistic painting. This artistic interpretation of the Universe makes for a journey that will not be forgotten.

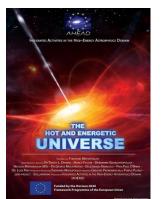


Out There: The Quest for Extrasolar Worlds (2017) 30 minutes

For thousands of years, mankind thought that the Earth was the center of the Universe. Thanks to our curiosity, imagination and urge to explore, we now know that planets like our Earth are nothing special in the cosmos. The Sun is just one ordinary star among hundreds of billions in our galaxy, the Milky Way. With the world's most powerful telescopes, we are able to explore more and more of the Universe. What we have found so far has surpassed even the wildest expectations of scientists as well as authors of science

fiction. Most stars have planets — it turns out they are more common than we thought. A huge diversity of different worlds is out there, just waiting to be discovered.





The Hot and Energetic Universe (2016) 30 minutes

This show presents the achievements of the modern astronomy, the most advanced terrestrial and orbital observatories, the basic principles of electromagnetic radiation and the natural phenomena related to the High Energy Astrophysics.

The XMM-Newton and the Integral missions, are leading the exploration of the X-ray and gamma-ray universe. ESA's mission ATHENA, to be launched in

2028, will carry the most sensitive X-ray telescope ever and it will be the flagship of all high X-ray missions.



The Incredible Sun (2016) 11 minutes

Every second the Sun emits million times more energy than the world consumes every year. Where does such a huge amount of power come from? Discover our star through the breathtaking time lapses. Thanks to the real images taken by the Solar Dynamics Observatory and processed by advanced mathematical methods, you will experience the true nature of the Sun and find out that it is far from being as calm as it seems at first glance.

The Sun's activity, pronounced by terrific solar flares, sunspots and coronal mass ejections, influences our planet, by producing impressive auroras but also by damaging distribution networks and communication satellites. Is it a threat to us, then?



Sunstruck (2016) 21 minutes

Travel back to the beginning of time and experience the birth of the sun. Discover how it came to support life, how it threatens life as we know it, and how its energy will one day fade away.



Learn About Space Missions:



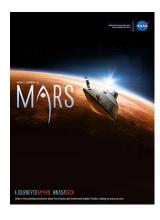
Back to the Moon for Good (2013) 25 minutes

Immerse yourself in a race to return to the moon 40-years after the historic Apollo landings. Learn about the moon's resources and discover what humanity's future on the moon might hold. Narrated by Tim Allen, *Back To The Moon For Good* presents the Google Lunar XPRIZE, and the personal stories of competition it inspires.



IBEX – Search for the Edge of the Solar System (2009) 28 minutes

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, *IBEX: Search for the Edge of the Solar System* 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.



NASA Journey to Mars (2015) 10 minutes

NASA wants you to be part of the *Journey to Mars*. Today, NASA is pushing the boundaries of technology and innovation. NASA's fleet of robotic scientific explorers at Mars are paving the way for human exploration. Join us in a monumental journey of a lifetime to extend the frontiers of human exploration, gaze across alien landscapes, and see our Sun rise over new horizons.





New Horizons for a Little Planet (2014) 5 minutes

A lighthearted introduction to NASA's New Horizons mission to Pluto and the Kuiper Belt. Launched in 2006, the New Horizons spacecraft is scheduled to fly by Pluto and its moons in July of 2015. The purpose of the program is to introduce planetarium visitors to the mission prior to its arrival at Pluto.

After it encounters Pluto, New Horizons will continue on through the Kuiper Belt and the mission will likely be extended. A smaller, more primitive Kuiper Belt Object will then be targeted for a rendezvous in 2018 or 2019.

These encounters promise us unprecedented close up views of these distant worlds and the information gathered by New Horizons will provide valuable insight into the formation of our solar system and its planets.

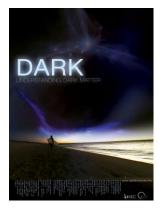


Saturn Ring World (2007) 22 minutes

Saturn is the true "Lord of the Rings." After nearly seven years in transit, the two-story Cassini-Huygens spacecraft began orbiting Saturn on July 1, 2004. Cassini continues to explore Saturn and its moons during its extended mission, while the Huygens probe landed on the surface of Titan, Saturn's largest moon. The Cassini Saturn encounter began with a flyby of Saturn's farthest moon, Phoebe.

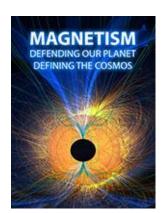


Explore the Mystery of Dark Matter and Magnetism:



Dark: Understanding Dark Matter (2012) 20 minutes

DARK 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.



Magnetism: Defending Our Planet, Defining the Cosmos (2017) 23 minutes

Magnetism demonstrates how the Earth's magnetic field protects our planet from energetic particles from the Sun and galaxy, and how the magnetic field also protects the water in our atmosphere from being swept away by the solar wind. It shows the first aurora seen simultaneously from the ground and from the ISS, and tells about the MSS Mission (Magnetospheric Multiscale) and its quest to understand the magnetic connection between the Earth and the Sun.



Phantom of the Universe (2017) 27 minutes

Phantom of the Universe showcases an exciting exploration of dark matter, from the Big Bang to its anticipated discovery at the Large Hadron Collider.

The show reveals the first hints of its existence through the eyes of Fritz Zwicky, the scientist who coined the term "dark matter." It describes the astral choreography witnessed by Vera Rubin in the Andromeda galaxy and then plummets deep underground to see the most sensitive dark matter detector on Earth, housed in a former gold mine.

From there, it journeys across space and time to the Large Hadron Collider at CERN, speeding alongside particles before they collide in visually stunning explosions of light and sound, while learning how scientists around the world are collaborating to track down the constituents of dark matter.



The Dark Matter Mystery
Exploring a Cosmic Secret

The Dark Matter Mystery (2015) 38 minutes

What keeps Galaxies together? What are the building blocks of the Universe? What makes the Universe look the way it looks today? Researchers all around the world try to answer these questions. We know today that approximately a quarter of the Universe is filled with a mysterious glue: Dark Matter. We know that it is out there. But we have no idea what it is made out of.

This planetarium show takes you on the biggest quest of contemporary astrophysics. You will see why we know that Dark Matter exists, and how this search is one of the most challenging and exciting searches science has to offer. Join the scientists on their hunt for Dark Matter with experiments in space and deep underground. Will they be able to solve the Dark Matter Mystery?

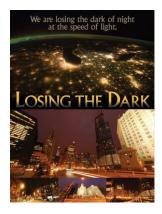


Discover Flight, Sight, and Telescopes:



Flight Adventures (2012) 20 minutes

Discover the science of flight through the eyes of a young girl and her grandfather as they explore how birds, kites, planes and models fly. Learn about the history and future plans of flight and how NASA is discovering new and safer ways to travel with the help of future engineers and aviators - like YOU!



Losing the Dark (2013) 6 minutes

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.

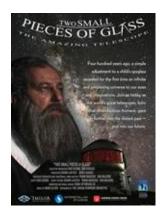
Losing the Dark introduces and illustrates some of the issues regarding light pollution and suggests three simple actions people can take to mitigate it.



Seeing! A Photon's Journey Across Space, Time, and Mind (2017) 22 minutes

Based on a 1-hour PBS documentary, *Seeing!* uses hemispheric 2D and 3D animations and video to explore the fascinating processes of the cosmos, from astrophysics to the biology of the eye and brain. Imagery from all over the world including humanity, landscapes, skyscapes, wildlife and of space are the backdrop for photo-realistic animations, which are used to create a story of a photons' journey through the eye and its conversion to an electrochemical impulse that then travels the neuro-pathways of the brain to the various centers that create the image the brain sees.





Two Small Pieces of Glass (2016) 23 minutes

Beautifully photographed in 4K digital cinematography, the film is a visually stunning chronicle of the history of the telescope from the time of Galileo, its profound impact upon the science of astronomy, and how both shape the way we view ourselves in the midst of an infinite universe.

The film features interviews with leading astrophysicists and cosmologists from the world's renowned universities and observatories, who explain concepts ranging from Galileo's act of revealing the cosmos with a simple

telescope, to the latest discoveries in space, including startling new ideas about life on other planets and dark energy - a mysterious vacuum energy that is accelerating the expansion of the universe.