

## Planetarium Shows Available to School Groups

For groups of 25 or more students, teachers may request any one of the shows below to be shown at 9 am or 10 am on Tuesday through Friday. Smaller groups may request one of the regularly scheduled shows at 11 am, 1 pm, 2 pm, or 3 pm. (See “Experience” and “Planetarium”)

### Dawn of the Space Age (Grades 5 and up)

Re-live the excitement of space exploration’s early days, from the launch of Sputnik to the Apollo lunar landings, and on to current voyages. Witness the drive, passion, and death-defying adventures of astronauts and cosmonauts, and their perseverance to explore space. This program is the first 3D stereo planetarium presentation in the world.



### The Secret of the Cardboard Rocket - (Pre-K to Grade 3)

Special children’s show in which two young adventurers turn a cardboard box into a rocket and blast off on an awesome adventure. They visit each planet in the solar system and find out what makes Earth a special place to live.

### Legends of the Night Sky: ORION - (Grades 2 – 5)

A fun-filled, imaginative look at stories and legends about great hunter of the winter sky. Narrated by animated audiences follow Orion’s adventures as he grows to manhood, mythical beasts, foils evil plots and wins the heart of the moon-goddess. The program concludes with a live look at the sky, including how to find Orion from your own backyard! Guide available (go to “Teachers” and “Classroom Resources”).



Orion, the characters, battles beautiful current night Teacher



### Skies Over Hawai’i - (Grades K – 8)

A live tour of the current night sky featuring stars, planets, and more! Your guide will share stories of constellations, look at the Moon’s current phase, and reveal planets you can see from your own backyard. The program also highlights Hawaiian Star Lines that Polynesian voyagers used to navigate the oceans.

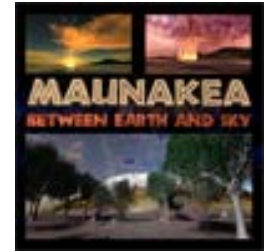
### One Ocean, One Sky - (Grades 4 and up)

Take a journey of discovery with Master Navigator Kalepa Baybayan. Learn about Hawaiian Star Lines and how they are used to navigate ocean voyaging canoes. Explore the legends of Makali’i and Subaru and the historical connections of voyaging in Hawai’i and Japan. Experience Hōkūle’a’s 2007 voyage from Hawai’i to Japan.



## Maunakea: Between Earth and Sky - (Grades 4 and up)

Explore connections between Hawaiian culture and Maunakea astronomy. Become immersed in the story of Pele and Poli`ahu and the creation of the Hawaiian Islands. Gaze into the night sky, past planets, galaxies and swirling nebula—back to the beginning of the universe—and fly through an observatory atop Maunakea.



## Sesame Street – One World, One Sky - (Grades Preschool – 2)

Sesame Street - One World, One Sky begins on *Sesame Street* when Elmo's friend, Hu Hu Zhu, visits from China. Together, Big Bird, Elmo and Hu Hu Zhu locate the Big Dipper, the North Star and the Moon in the night sky. Elmo and Hu Hu Zhu want to learn more about the Moon, so Big Bird suggests that they use their imagination to travel there. Once on the Moon, Elmo and Hu Hu Zhu quickly learn that the Moon has a very different environment than Earth. They discover there is no air on the Moon and learn that without air there can be no trees, animals, flowers or, to their disappointment, flying kites or playing soccer. Realizing this makes them homesick, so they use their imagination to take them back to *Sesame Street*. Back on Earth, Big Bird, Elmo and Hu Hu Zhu realize that even though they live in two different countries, they still share the same sky.



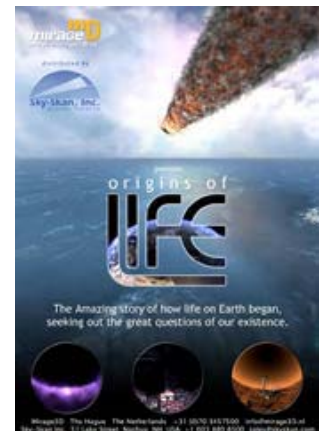
## Tycho to the Moon – (Grades Pre - 3)

Meet Tycho, a dog who doesn't just howl at the moon, but wants to go there. Blast off on an amazing ride into space with Tycho and his young friends Ruby and Michael. Learn about night and day, space travel, the phases of the Moon and features of the lunar surface. Take a close-up look at the Sun, watch the effects of gravity, see the Earth from space and watch meteors shoot across the night sky.



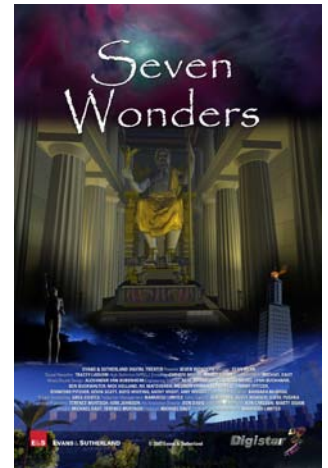
## Origins of Life – (Grades 6 and up)

Origins of Life deals with some of the most profound questions of life science: the origins of life and the human search for life beyond Earth. Starting with the Big Bang, in chronological order, the show deals with the prebiotic chemistry in the Universe, the formation of stars, formation of solar systems, and the first life on Earth. Furthermore Origins of Life covers the great extinctions as well as our search for (primitive) life beyond planet Earth. Origins of Life is a inspirational journey through time and a celebration of life on Earth.



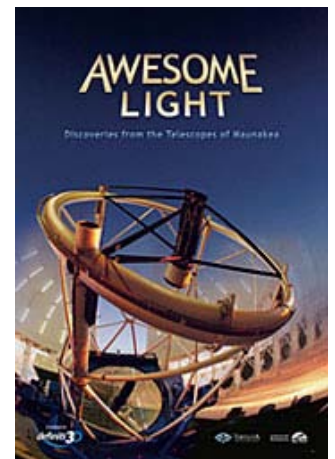
## Seven Wonders – (Grades 4 and up)

Seven Wonders explores the ancient wonders of the world as they have not been viewed for thousands of years. Using digital technology, we turn back Time to see them at the height of their majesty and glory. We will investigate the theories of how these wonders were created and compare them to some of the universe's greatest wonders such as supernovae, black holes, and nebulae. Seven Wonders is narrated by British actor Sean Bean, who played the character Boromir in the feature film trilogy *Lord of the Rings*. It includes a guided tour of the night sky featuring stars, planets, constellations, and more!



## Awesome Light I: Mirrors on the Mountain (3D) – (Grades 6 and up)

Hawaiians care for Maunakea as an elder and a sacred place that connects them to their place of origins. Astronomers from around the world care for Maunakea as a place to search for knowledge – it is here that the world's most renowned observatories seek to understand the great questions of the universe. See how Subaru Observatory studies distant solar systems – stars and planets that may be similar to our own. Learn how Gemini watched the death of a star in a far-off galaxy to understand how the universe seeds elements that form the building blocks of all matter. Marvel at CFHT's Legacy Survey that has mapped many thousands of galaxies to figure out how structure in the universe was created. Explore a massive black hole at the center of our galaxy as viewed by W.M. Keck Observatory. The program is presented in 3D.



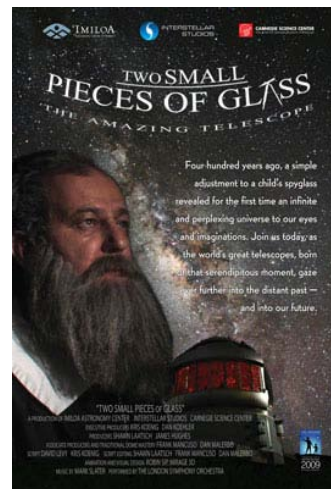
## Awesome Light II: Seeing the Invisible (3D) – (Grades 6 and up)

How do we see the invisible? By looking using different kinds of eyes! Seeing the Invisible takes the audience to Maunakea and the radio and submillimeter observatories located there. In this episode we see the remnants of a comet collision with Jupiter using the SMA, fly into the heart of our Milky Way Galaxy and see gas flows there from JCMT, study star formation in the Whirlpool Galaxy from CSO, and explore the largest black hole and jet in the Universe with the VLBA. The program uses dramatic footage of each of these observatories and displays their science results in spectacular 3D.



## Two Small Pieces of Glass: 400 years of the Telescope – (Grades 6 and up)

Explore 400 years of the telescope and its discoveries as seen by two students and their mentor as they attend a star party. Learn how Galileo, Newton and many others developed these instruments and how they have allowed humans to learn about the universe. Experience the view from the largest observatories in the world such as Maunakea, Cerra Telolo, and numerous other ones around the globe. This program celebrates the International year of Astronomy in 2009.



## IBEX: Search for the Edge – (Grades 7 and up)

Join scientists who are investigating the boundary between our Solar System and the rest of our galaxy. This show follows the creation of NASA's Interstellar Boundary Explorer (IBEX). Students 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.



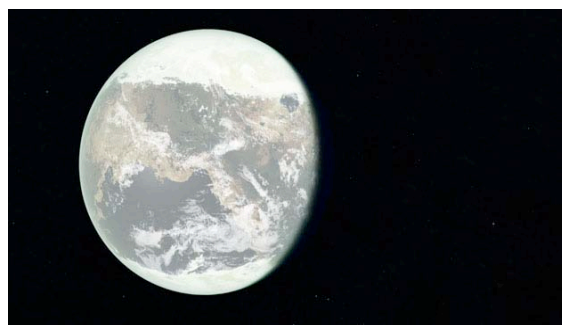
## 3D Sun – (Grades 6 and up)

From Earth, the Sun cannot be looked at with human eyes. 3D SUN gives students a chance to see the Sun up close in startling 3D. Stand above the Arctic Circle and witness the most brilliant auroras on Earth; take a ride on a solar blast from Sun's surface to Earth's Magnetosphere, and come to a deeper understanding of what this vast sea of fire means to life here on Earth.



## Fragile Planet - (Grades 5 and up)

Travel 120 million light years to rediscover home! Earth, our only known haven for life, inhabits a special place in the cosmos. Sigourney Weaver guides us on an immersive excursion that will inspire a new perspective on our home world. After a close-up look at Earth, we visit planets and moons in our solar system in search of hide-outs for life, and then venture outward to exo-planets and beyond. This visually intense program uses the latest visualization techniques to weave together observed data, including high resolution satellite and spacecraft imagery, terrain maps, and pinpoint positioning of stars, exo-planets and galaxies.



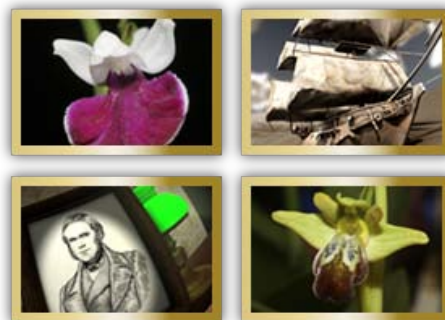
## **Bugs! A Rainforest Adventure (3D) – (Grades 5 and up) (2D) – (Grades 2-4)**

Get a view of the fascinating universe of insects magnified up to 250,000 times their normal size in A Rainforest Adventure – Bugs! Become immersed in a miniature world, where a leaf weighs as much as a car and a single raindrop can quench the largest thirst. Highlighting the extraordinary world of insects, the show focuses on the life cycles of a praying mantis and a butterfly from their birth to their inevitable encounter with a predator in the tropical rainforest of Southeast Asia. See a caterpillar hatch from a single tiny egg to metamorphose into a butterfly, and watch as a praying mantis snaps up a fly for its dinner!



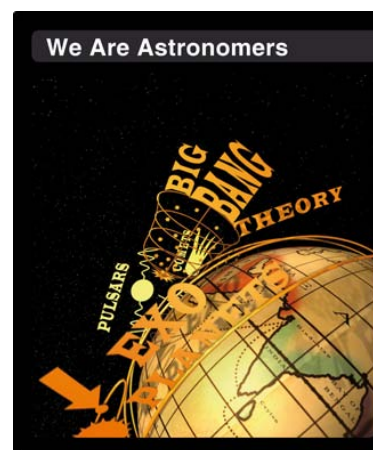
## **Darwin and his Fabulous Orchids - (Grades 7 and up)**

This show presents the fascinating world of evolutionary biology. It is an introduction to the largest and most varied family of plants on planet earth. Orchids are amazingly seductive and full of tricks when it comes to attracting insects and ensuring pollination, which in turn means securing their own survival. Their creativity amazed famous scientist, Charles Darwin, who carried out intensive research on this family of plants. The show is optically intense, biologically and historically authentic in every detail, and an elegant experience in which you will lose yourself in a sea of colors amid the beautiful orchids of the world!



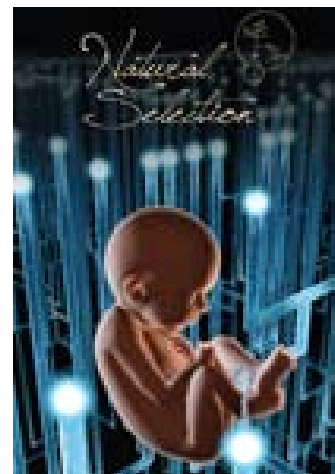
## **We are Astronomers – (Grades 4 and up)**

We are Astronomers reveals the global collaboration, technology and dedication required to answer the unresolved questions of the Universe. See how technologies such as the Large Hadron Collider, the observatories of Chile and the Hubble Space Telescope work and how they are used by teams around the world. The show appropriately ends with the sentiment that we are indeed “all astronomers!”



## **Natural Selection (3D) – (Grades 7 and up)**

Join the young Charles Darwin on an adventurous voyage of exploration circumnavigating the World on the HMS Beagle. In Victorian times many physical phenomena were already discovered and described by natural laws, but life’s most eloquent mechanism was still unknown: How could new species arise to replace those lost in extinction? It was time for someone to come forth with a Naturalist explanation of this Mystery of Mysteries. Allow Darwin himself to reveal this simple and most beautiful mechanism that explains the evolution of all life on Earth: Natural Selection, the single most wonderful idea anyone has ever had...



### Hayabusa: Back to Earth – (Grades 3 and up)

On May 9, 2003, the Japanese space probe, HAYABUSA, was launched atop a M-V Launch Vehicle on a mission to return a sample from the asteroid Itokawa. However, as the 2 billion kilometer mission went on, more and more technical challenges faced the tiny probe. Yet, it eventually landed on the asteroid and after more amazing work and problem-solving by earth-based scientists and engineers, it returned to earth on June 13, 2010. This is the inspiring story of that “little spaceship that could!”



### Tales of the Maya Skies – (Grades 4 and up)

Tales of the Maya Skies tells the story of how the ancient Maya interwove astronomy and culture to create a stable society that spanned 2000 years. The show brings us back to the ancient jungles of Mexico, where the Maya built cities and temples aligned to the movements of the Sun, Moon, and planets. Over many years they observed and documented astronomical events with great accuracy. The Maya made sense of an ever-changing world by observing, recording and predicting natural events such as solstices, solar eclipses, weather patterns, and planetary movements. These observations, in combination with a sophisticated mathematical system, allowed them to develop a precise calendar system; their measurements of the length of the solar year were more accurate than measurements the Europeans used as the basis of the Gregorian calendar. The Maya were also able to forecast seasonal change and developed the concept of mathematical zero, enabling them to predict events into the future. Recent deciphering of the Maya hieroglyphics is providing archeologists with new and exciting discoveries. Using three dimensional laser scanning and advanced graphic techniques, the virtual reconstruction of architecture in Tales of the Maya Skies also supports these archeologists in interpreting the ancient sites and contributes to their conservation. Tales of the Maya Skies weaves together this rich combination of science, culture, and legend, immersing viewers in the sounds and sights of an ancient way of life. Teachers are also encouraged to make use of the online educational activities in their classrooms (pro or post field trip) on the show's website: <http://www.mayaskies.org/onlineactivities.html>



## Earth, Moon, and Sun – (Grades 2-6)

This planetarium show explores the relationship between the Earth, Moon and Sun with the help of Coyote, an amusing character adapted from Native American oral traditions who has many misconceptions about our home planet and its most familiar neighbors. His confusion about the universe makes viewers think about how the Earth, Moon and Sun work together as a system. Native American stories are used throughout the show to help distinguish between myths and science. Learn why the Sun rises and sets and the basics of fusion and solar energy. Examine the Moon's orbit, craters, phases and eclipses. Also, the show explores past and future space travel to our Moon and beyond.



## Our Place in Space – (Grades Pre-3)

While solving a crossword puzzle about the sky, endangered animals explore the cause of day and night, the importance of our star the sun, the beauty of the constellations, and the variety of objects that make up the Universe. Throughout the program students are encouraged to help solve the puzzle by shouting out the answers to the clues. Students learn science concepts and science vocabulary from friendly animals who travel to exotic locations.



## Legends of the Night Sky: Perseus and Andromeda – (Grades Pre – 3)

Based on constellations viewed in the fall sky, this humorous and well-paced animated story highlights the Greek myths associated with these star patterns. Watch how Perseus, the son of Zeus, grows up to become a great warrior, slays the evil Medusa, rescues Andromeda from Cetus, the sea monster and unwittingly fulfills ancient prophecy. This entertaining tale is designed to engage young students and stimulate their interest in learning about the night sky.

