

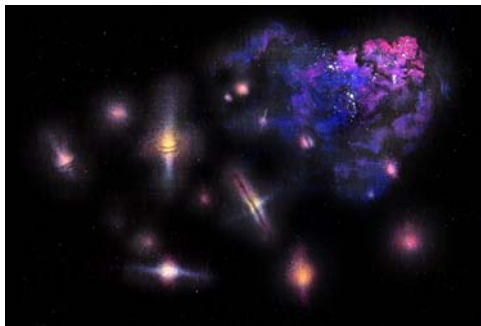
***A journey between two galaxies spans human history — and reveals the secrets of the cosmos!***

Running time: 30:00  
Grade level: 4-12 and  
general public audiences

Narrated by Michael Dorn  
Written by Carolyn Collins Petersen  
Produced by Mark C. Petersen  
Original artwork by Tim W. Kuzniar and Michael W. Carroll

A beam of light leaves a star in the Andromeda Galaxy and travels across the void of intergalactic space. For much of its journey it traverses the nearly-empty realm between galaxies. In the meantime, on a planet located in a neighboring galaxy, intelligent life evolves.

As the light speeds across the light years over the course of many centuries, the primitives on the planet form cultures and civilizations — and begin to wonder about the universe surrounding them. Their awareness of the night sky increases as the beam of light draws nearer to their planet.

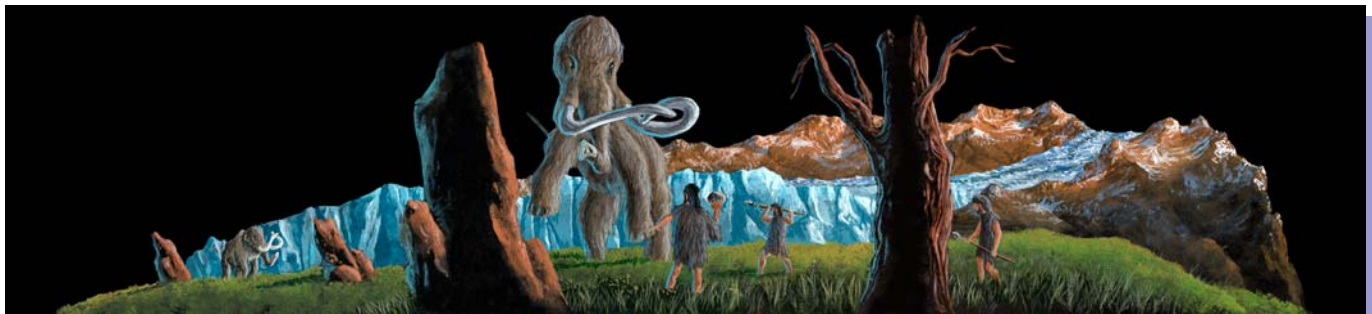


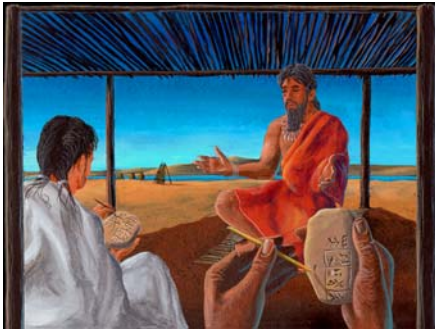
When the light reaches the Earth, some of the descendants of the early hunters have just escaped the bonds of their world's gravity, and visited the Moon. In modern times, scientific study of space helps the planet's current inhabitants use light to explore the galaxy from which it came — and beyond.



***Light Years From Andromeda***

teaches the concepts of light speed, and the light year and how astronomers use them to measure distances to some familiar celestial objects— the Moon, the Sun, the planets, nearby stars, and galaxies. The show briefly touches on the properties of light that help determine a star's age and temperature, and gives a fascinating look at how light and distance allow us to “look back” further in time as we gaze farther into space.





## Science Education Content

*Light Years from Andromeda* focuses on light, with light, the concept of light speed, and the distance measurement unit of the light-year all as tools of astronomical exploration. These concepts are woven together along with historical and cultural perceptions of the sky and help relate the information presented in the show to the lives of students, families, and the general public.

Show content is relevant in the following subject areas:

### Earth and Space Sciences:

- objects in the sky: Sun, Moon, stars, planets, galaxies, quasars, interstellar medium
- properties of stars
- creation of the universe (the Big Bang)

### Physical Science:

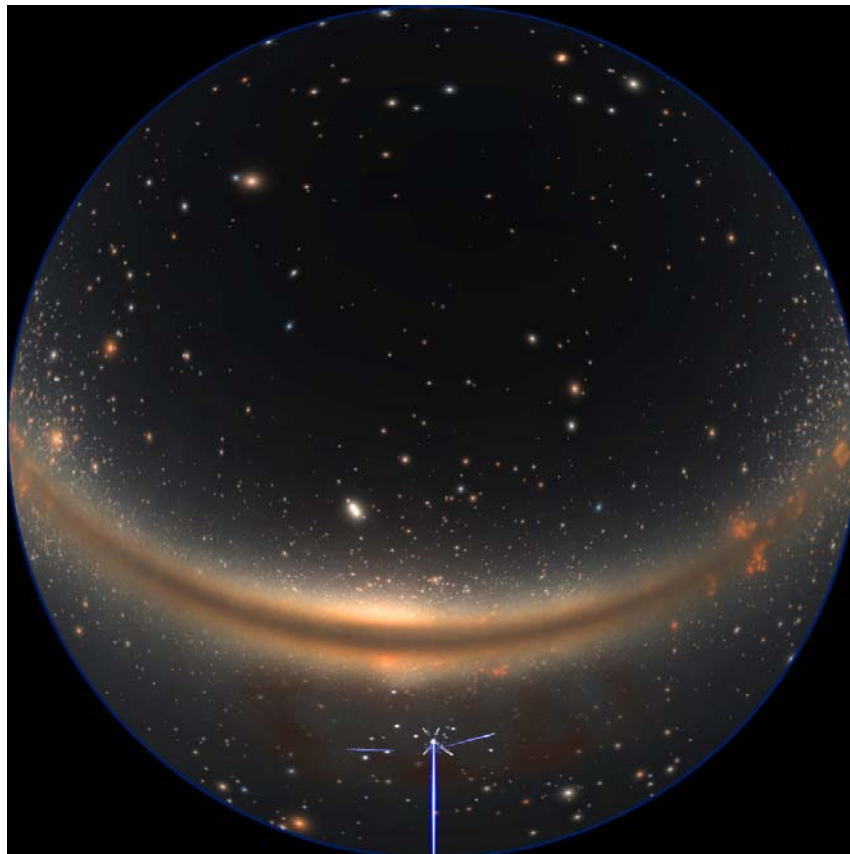
- light, light speed, light-year as a measurement unit

### Science as a human endeavor:

- early maps of the sky
- rise of scientific exploration of the universe
- missions to the Moon, solar system probes
- development of the modern science of astronomy
- early human history, cultures, and perceptions of the sky

This show adheres to principles put forth in the National Academy of Sciences' Education Standards published in 1996. For more details, visit the NAS Standards Web site at: <http://books.nap.edu/html/nse/html/index.html>.

A beam of light from the Andromeda Galaxy encounters gas and dust clouds in the Milky Way...

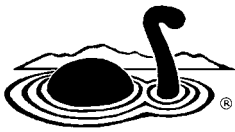


... just one of the ~54,000 dome master frames in this show.



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## FULLDOME SHOW PRICING

We make Loch Ness Productions shows available in the sizes required by the various projector systems they will run on. For pricing purposes, there are four general size categories, **SMALL, MEDIUM, LARGE,** and **X-LARGE.** Contact us for recommendations to help determine which size is right for you.

Each show includes a performance license, which basically provides you with the permission you need to present the show to the public. The license period is 50 years — for all practical purposes, unlimited time. You can read the details on our Web site, so you'll know in advance what the license terms are.

Show Title (Product Code ###)	Product Code	MOVIE SIZE	For systems projecting circles that are:	Price
<b>HUBBLE Vision 2</b> (HV2) <b>Larry Cat In Space</b> (LCS) <b>MAGELLAN: Report From Venus</b> (MRV)	###-FS	<b>SMALL</b>	smaller than 1300 pixels	<b>\$1595</b>
	###-FM	<b>MEDIUM</b>	1300 to 2000 pixels (or prewarped)	<b>\$2195</b>
	###-FL	<b>LARGE</b>	larger than 2000 pixels	<b>\$3095</b>
	###-FX	<b>X-LARGE</b>	sliced* for multiple projectors	<b>\$4095</b>
<b>Season of Light</b> (SOL)	###-FS	<b>SMALL</b>	smaller than 1300 pixels	<b>\$1895</b>
	###-FM	<b>MEDIUM</b>	1300 to 2000 pixels (or prewarped)	<b>\$2495</b>
	###-FL	<b>LARGE</b>	larger than 2000 pixels	<b>\$3395</b>
	###-FX	<b>X-LARGE</b>	sliced* for multiple projectors	<b>\$4395</b>
<b>Light Years From Andromeda</b> (LYA) <b>MarsQuest</b> (MQ) <b>Oceans In Space</b> (OIS) <b>Seasonal STARGAZING</b> (SSG) <b>Sky Quest</b> (SQ) <b>The Cowboy Astronomer</b> (TCA) <b>The Voyager Encounters</b> (TVE)	###-FS	<b>SMALL</b>	smaller than 1300 pixels	<b>\$1995</b>
	###-FM	<b>MEDIUM</b>	1300 to 2000 pixels (or prewarped)	<b>\$2595</b>
	###-FL	<b>LARGE</b>	larger than 2000 pixels	<b>\$3495</b>
	###-FX	<b>X-LARGE</b>	sliced* for multiple projectors	<b>\$4495</b>

**\*About slicing:** Multi-projector edge-blended systems require pre-slicing of a show's images into the individual channels needed for each projector. We can slice for most standard configurations. But some theaters may have non-standard configurations, or require the use of proprietary software to slice. In those cases, we'll need to contract with your system provider for some custom encoding. Contact us about costs.

### Multiple Copies of Movies...

Ordinarily, the shows we distribute are licensed for installation on a single playback system and/or site. But maybe you need multiple copies of your movies because your institution operates two or more fulldome systems. Or let's say you already have large and sliced video movie files, and then get an additional portable fulldome system and need smaller movies to run on it. For these situations, you'll need to contact us about extending the license from the first show to cover additional installations. Then, buy the appropriate number and size of Additional Movie Files you need, at the discounted prices we offer in the table to the right.

ADDITIONAL MOVIE FILES			
Product Code	MOVIE SIZE	For systems projecting circles:	Price
<b>VMA-S</b>	<b>SMALL</b>	smaller than 1300 pixels	<b>\$1000</b>
<b>VMA-M</b>	<b>MEDIUM</b>	1300 to 2000 pixels (or prewarped)	<b>\$1600</b>
<b>VMA-L</b>	<b>LARGE</b>	larger than 2000 pixels	<b>\$2500</b>
<b>VMA-X</b>	<b>X-LARGE</b>	sliced for multiple projectors	<b>\$3500</b>

### Projector/Movie Upgrades...

Let's say you already have our fulldome movies at a small size, but then choose to upgrade to a higher resolution projector system and need to get new, larger movies. You retire your lower-resolution system and no longer run the movies installed on it. For this situation, you'll need to contact us about transferring the license you received with your first show to cover your new installation. Then, simply buy the appropriate size video you need, at the discounted prices we offer in the Video Movie Upgrades table.

VIDEO MOVIE UPGRADES			
Product Code	MOVIE SIZE	For systems projecting circles:	Price
<b>VMU-S</b>	<b>SMALL</b>	smaller than 1300 pixels	<b>\$500</b>
<b>VMU-M</b>	<b>MEDIUM</b>	1300 to 2000 pixels (or prewarped)	<b>\$800</b>
<b>VMU-L</b>	<b>LARGE</b>	larger than 2000 pixels	<b>\$1250</b>
<b>VMU-X</b>	<b>X-LARGE</b>	sliced for multiple projectors	<b>\$1750</b>

### The details...

Our fulldome shows are made in fisheye circle form, and ship as ready-to-play *movies*, with audio and video files encoded/sliced/prewarped in formats and resolutions compatible with today's projector systems. **We do not ship dome masters.** We record the files onto data DVDs, USB Flash or external drives.

### What we send...

In addition to the show, we also provide the show's fulldome "trailer"; still images that can be used for advertising and promotion; the license agreement, and a reference book in PDF form, containing the show script, production notes, resources, acknowledgements, and additional information.

### Installation...

While it may be possible to play videos directly from our distribution media, we expect you'll copy the files onto your fulldome system for optimum performance. We provide pre-written play scripts for some systems; others will simply edit button scripts or enter the necessary system commands to load and play the movies.