

# BRIGHT HORIZONS #6 VIDEOS

## 6th of December — Sunday

4pm – 5:30pm      **An Atom From Boston**  
*Lawrence Krauss, Ph.D.*

Standing somewhere between natural history and biography, Dr. Krauss lays out the life history of an single atom from the beginning of the universe to the end. Life is a journey, and this atom's journey runs from nuclear physics to chemistry to cosmology, with passages through geology and biology along the way. Whether you are an atom aficionado, or more a "universe in a grain of sand" type, sit with Dr. Krauss for a refreshing look at an atom.

6pm – 7:30pm      **The Space Shuttle Program**  
*Guion S. Bluford, Jr., Ph.D.*

Countdown to contemporary treasure — a first-hand account of life in space. Dr. Guion Bluford, a veteran of four Space Transportation System (STS) missions (STS 8, STS 61-A, STS 39, and STS 53) will present a look at the Space Shuttle Program, from its inception to the wrap up of its service in 2010. Learn about training for shuttle duty, noteworthy aspects of daily routine in space on the Discovery and Challenger, and gain a behind the scenes look at the science and technology projects executed by Shuttle astronauts.

## 7th of December — Monday

6pm – 7:30pm      **The International Space Station**  
*Guion S. Bluford, Jr., Ph.D.*

Join Dr. Bluford for a comprehensive survey of the International Space Station (ISS) Program. He will orient us to the history and complexities of this permanent human presence in space. From project inception to launch to ongoing development and daily living, pick up a new understanding of the logistics, function, and significance of the ISS.

## 8th of December — Tuesday

8:30am – 10am      **Einstein's Biggest Blunder — A Cosmic Mystery Story**  
*Lawrence Krauss, Ph.D.*

Recent discoveries have implications for our understanding both of the future of our universe and life within it and for our understanding of fundamental physics. Join Dr. Krauss as he covers the fate of the Milky Way, what lies beyond the event horizon, and cosmic phenomena of the next 100 billion years.

## 9th of December — Wednesday

4:45pm – 6:15pm      **Impact!**  
*Jim Bell, Ph.D.*

The solar system is teeming with millions of asteroids and comets, and occasionally they crash into the planets with catastrophic consequences. Planetary scientist Jim Bell leads a discussion about the science fact and science fiction of the role of such impacts in shaping the geology and biology of our home world. Earth has been hit in the past, with severe

consequences for life on our planet. Will Earth be hit again in the future? Almost certainly. Unlike any previous species in history, however, we have the chance to understand the threat ahead of time and, perhaps, to prevent a planetary-scale catastrophe.

6:30pm – 7:30pm      **Physics of Star Trek Q&A**  
*Lawrence Krauss, Ph.D.*

This Q&A session is open to everyone in our group — whether you signed up for the conference or not. Beer, wine, and soda will be provided while you sit back, relax, and enjoy the journey to where no one has gone before.

## 10th of December — Thursday

4pm – 5:30pm      **Postcards from Mars**  
*Jim Bell, Ph.D.*

The NASA Mars Exploration Rovers Spirit and Opportunity landed on the Red Planet in January 2004, and have been driving, photographing, and analyzing their landing sites for the past five years. Professor Bell has been the lead scientist in charge of the rovers' Panoramic Camera imaging system since the rovers were "born" nearly a decade ago. Come along for an amazing journey of geologic exploration and learn about the ways that both rovers have been utilized to discover convincing evidence that Mars was once warmer, wetter, and much more Earth-like than it is today. **(this video is excellent in quality)**

6pm – 7:30pm      **The Future of the Space Program**  
*Guion S. Bluford, Jr., Ph.D.*

Travel back to the future with an in-depth discussion on the future of the NASA Space Program. Dr. Bluford will address the issues and opportunities ahead as space exploration matures. You'll get the big picture of the Constellation Program (with its Aries, Orion, and Altair components) which will return humans to the moon and later take them to Mars. Come away with the insights and views on what lies ahead from Dr. Bluford, astronaut and aeronautical engineer. **(this video is excellent in quality)**

## 11th of December — Friday

4pm – 5:30pm      **The Undiscovered Country**  
*Lawrence Krauss, Ph.D.*

We humans have undoubtedly questioned the origins of the cosmos for as long as we've walked the Earth but we've made spectacular progress in recent years. This progress forces us to discard much of what cosmology textbooks told us up until quite recently. Get the latest on competing ideas, their implications, and how they can be experimentally tested.

6pm – 7:30pm      **An Evening with Shuttle Astronaut Dr. Guion Bluford**

How has aeronautics affected society and vice versa? Having worked in space, what open questions does Dr. Bluford have about space exploration, and space? What are the core characteristics and qualities shared by astronauts i.e., what is "the right stuff"? Dr. Bluford will present food for thought arising from his experience in space (688 hours), in jet cockpits (5,200 hours), and in the field of aeronautical engineering. We'll have an out-of-this-world round of astronaut Q&A, too! **(this video is excellent in quality)**