Planetarium/Star Show: **BIG**

**Description:**
One of the most asked questions about the Universe is “How big is it?” and that’s one of the hardest to answer. BIG has been produced to tackle this question and does so by taking the audience on an immersive journey to the far reaches of the Universe that we are currently able to observe. BIG combines a light-hearted storytelling style with computer animation, stop-motion character animation and a surround sound musical score to bring a really big subject down to Earth.

The show includes a live **customized** Digistar II tour of the current evening sky.

*Sponsored in part by the State of Florida, Department of State, Division of Cultural Affairs and the Florida Arts Council, and the National Endowment for the Arts.*

**Basic Information:**
- Age Level: General Audience (Grades 6 +).
- Maximum participants per session: 210
- Location: Planetarium Theater
- Running Time: 40 minutes (add 20 min. for Star Walk)

**Key Concepts Covered:**
- Light’s finite travel time leads to complications for space travel and for long-distance communication (lag time)
- Studying the night sky has been a human endeavor for millennia and will likely continue in the far future
- The sky studied by our distant ancestors was different from the one we see today.
- Our understanding of the universe has been expanded by sending probes and telescopes into space.
- The universe is so large and objects in it so distant from one another that we could never hope to travel physically across it to explore – let alone even to the nearest star.

**Sunshine State Standards Addressed:**

**Kindergarten:**
- **Big Idea #5 - The Earth in Space and Time**
  - K.E.5.6 Note that some things are far away and others are nearby as seen from Earth.

**1st Grade:**
- **Big Idea #5 - The Earth in Space and Time**
  - 1.E.5.1 Explain that there are many more stars in the sky than can be counted & they're not evenly scattered in the sky.
  - 1.E.5.3 Explain how magnifiers make things look bigger & allow us to see things not visible to our eyes alone.
**BIG 3rd Grade:**

**Big Idea #5 - The Earth in Space and Time**

- 3.E.5.1 Stars have different sizes and brightness; all stars (except the Sun) are so distant that they look like points.
- 3.E.5.2 Explain that our Sun is a star that emits light energy.
- 3.E.5.3 Explain that the Sun looks big & bright because it is the closest star to Earth.
- 3.E.5.4 Demonstrate that gravity is a force that can be overcome.
- 3.E.5.5 Explain that many more stars are visible in a telescope than can be seen with eyes alone.

**5th Grade:**

**Big Idea #5 - The Earth in Space and Time**

- 5.E.5.1 Recognize that a galaxy consists of gas, dust & many stars; include objects orbiting stars. Identify Milky Way galaxy as our home.
- 5.E.5.3 Identify solar system objects: Sun, planets, moons, asteroids & comets. Identify Earth's place in the Solar System.

**8th Grade:**

**Big Idea #5 - The Earth in Space and Time**

- 8.E.5.1 Recognize the huge distances between objects in space; relate these distances to our knowledge of light & space travel.
- 8.E.5.2 The Universe has billions of galaxies, each containing billions of stars.
- 8.E.5.3 Distinguish hierarchical relationships between planets, sun, solar system, galaxy & universe; include distance, size & composition.
- 8.E.5.10 Assess how technology is essential to access to space & other remote locations, sample collection, measurement, data storage and communication of information.