



## Columbia Memorial Space Center Expo Program Schedule

Saturday, February 18th

### **So You Want to Build an R2?**

**11:00 am – 12:00 pm**

**Panelists: Members of the R2D2 Builders Club**

Did you know there's a whole club of people dedicated to building R2-D2 and the other droids of Star Wars? Come learn the basics and see what it takes to build your own Astromech droid from folks that are building their own!

### **Virgin Galactic: LauncherOne**

**1:00 pm – 2:00 pm**

**Panelists: Hannah McCallum, Matt Wierman, and other Virgin Galactic Engineers**

Small, affordable satellites are revolutionizing the way we explore space and study our home planet-but only if they can find an affordable, reliable way to launch into orbit. Virgin Galactic is developing LauncherOne, a new dedicated small-satellite launch vehicle. In design and construction in Long Beach, LauncherOne will be air-launched from a 747 and deliver satellites for space-based worldwide Internet, Earth observation, and asteroid hunting. LauncherOne is a 21st century rocket, taking advantage of new developments in 3D printing and composites. On this panel, hear directly from some of the rocket scientists and space salespeople who are making the small satellite revolution happen.

## **The Intersection of Art & Science (& Engaging the Public)**

**3:00 pm – 4:00 pm**

**Moderator: David Nieves**

**Panelists: David Delgado, Livio Ramondelli, Robert Hurt, Tony Harris**

There is no better place to watch the intersection of science and art than in comic books...and at NASA! David Delgado, the artist responsible for JPL's interplanetary travel art, visualization scientist Robert Hurt and comic artists Livio Ramondelli (Transformers), and Tony Harris (Starman, Ex Machina) get together to discuss how the artwork done for NASA has comic influences, and how space exploration (an integral part of comic books throughout history) and technology has been a big influence in the artwork that's been done for comics.

## **Seeing the Hidden Universe: (Much) More Than Meets the Eye**

**4:30 pm – 5:30 pm**

**Panelist: Dr. Robert Hurt**

When we look up at the sky, we only can perceive a tiny slice of the universe's glow in what we call the "visible" spectrum of light. NASA has opened our eyes to so much more that is hidden from us, peering into the birthplaces and deathbeds of stars, the fantastic structures of interstellar space, and the whirling patterns of galaxies. Find out more about how we use the inner workings of human color perception to see the invisible wonders captured by space telescopes of the past, present, and future.

**Sunday, February 19th**

## **The Future of Virtual and Augmented Reality**

**10:30 am – 11:30 am**

**Panelist: Mary Duda**

Join this Q&A discussion about the current state of VR and AR, and where both fields are headed with Mary Duda, CEO of a leading VR company.

## **Fascinating Fights: The Live Interactive Show**

**11:00 am – 12:00 pm**

**Moderator: Daniel J. Glenn**

**Panelists: Dr. Michael Dennin – Superhero Scientist, Siike Donnelly – Comic Book Historian, Ben Siepser – Rocket Scientist, John Kreng – Martial Arts Expert**

The live version of the ESPN style panel show where a group of experts academically discusses who would win in a fight between two superheroes or pop culture icons. Dr. Michael Dennin – Superhero Scientist, Siike Donnelly – Comic Book Historian, Ben Siepser – Rocket Scientist, John Kreng – Martial Arts Expert and Daniel J. Glenn – Analytical Mastermind.

## **Exploring the Science and Technology Behind Back to the Future**

**12:00 pm – 1:00 pm**

**Moderator: Daniel J. Glenn**

**Panelists: Dr. Michael Dennin, Ben Sieper**

Time has shown that the predictive powers of the Back to the Future franchise were uncanny. Sure they pretty much envisioned the Cubs winning the World Series, but what about the technology? This panel looks into four of the technologies featured in BTTF: The time traveling DeLorean, Mr. Fusion, Hoverboards, and Doc Brown's Wild West Ice Machine. We ask "Do these technologies exist, and if not, are they possible?" We explore these inquiries with the best panel imaginable: Dr. Michael Dennin – World Renowned Physicist, Ben Sieper – Rocket Scientist and Daniel J. Glenn – Analytical Mastermind.

## **Exploring Space in Cyberspace: How are Big Data Revolutionizing Astronomy**

**4:00 pm – 5:00 pm**

**Panelists: S. George Djorgovski**

Computing and information technology are changing profoundly essentially every aspect of the modern society, science and scholarship included. Astronomy is a good example of a science that is being fundamentally changed in the era of the "big data". Large digital sky surveys are now generating Petabytes of data, measuring hundreds or thousands of properties for hundreds of millions or even billions of celestial sources – stars, galaxies, quasars, etc. This is enabling many new discoveries that simply would not be possible without such large and complex data sets, and the analytics tools needed to explore them, including machine learning, artificial intelligence, and so on. We are seeing the rise of a new scientific methodology for the data-rich, computationally enabled science in the 21st century.