



BUENAVENTURA AEROSPACE AND ELECTRONIC SYSTEMS SOCIETY

Unlocking the Mysteries of Jupiter with Juno

Tracy Drain

**Deputy Chief Engineer for NASA's Juno Mission
NASA Jet Propulsion Laboratory(JPL)**

Thursday March 16, 2017 at 6:30 pm

CLU's Gilbert Sports Center, Room 253
130 Overton Court, Thousand Oaks, CA
Meetings are free and open to the public

Register at this [website](#)



As the largest planet orbiting the sun, Jupiter has had a profound influence on the solar system. But its origin remains a deep mystery... To learn more about how Jupiter was formed and how it has evolved, NASA sent the Juno mission to study the gas giant's gravitational and magnetic fields, and explore the swirling clouds of Jupiter's colorful, trademark atmosphere. Launched in August 2011, Juno successfully entered orbit in July of 2016. Come learn about the development and operations of the spacecraft, and see some of the exciting images that have been returned so far by the Junocam instrument (and processed by members of the public!).

Tracy Drain is a **Flight Systems Engineer** at the **Jet Propulsion Laboratory** in Pasadena, CA. Tracy was born and raised in Louisville, Kentucky, where she graduated from Waggener High School in 1993. She received a BS in Mechanical Engineering from the University of Kentucky. While at U of K, she interned at the NASA Langley Research Center in Hampton, Virginia. She went on to receive her MS in Mechanical Engineering from the Georgia Institute of Technology in May of 2000.



In her 16 years at JPL, she has participated in the development and operation of the Mars Reconnaissance Orbiter (MRO), Kepler (searching for new Exoplanets) and Juno (it went into orbit around Jupiter in July 2016). MRO is still orbiting Mars and returning valuable science data about the red planet; it also serves as a communications relay for the rovers currently exploring Mars. Tracy left MRO in the fall of 2007 to join the Kepler project, which was preparing for a March 2009 launch and a mission of hunting for Earth-like planets orbiting other stars in our Milky Way galaxy. In May 2009, Tracy joined the Juno project on the Project Systems and Flight Systems Engineering teams. Juno will study the giant planet's gravity and magnetic fields and learn about its structure. That knowledge will help scientists learn more details about the early history of our solar system.

Tracy is currently the Deputy Chief Engineer for the Juno mission.

Tracy became interested in space as a child, and her love of Math, Physics and anything related to Space led her to pursue a career as an engineer at NASA. In her free time, she can most often be found curled up with a good book (her other favorite way to explore new worlds).

Location: California Lutheran University
Gilbert Sports and Fitness Center, 2nd floor,
Rooms 253/254
130 Overton Court,
Thousand Oaks, CA 91360

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Pizza/networking starts at 6:30 pm
Talk starts at 7:00 pm

