

Mars Curiosity Seminar

Friday, November 2, 12-1 PM

UC San Diego

Structural and Materials
Engineering Building (SME)

Visual Arts Presentation Lab (Room 149)
(Level One, next to Visual Arts Gallery)



MSL Artist's Rendering, Courtesy: NASA/JPL-Caltech

On the night of August 5, 2012...

JPL engineers at NASA's Jet Propulsion Laboratory in Pasadena anxiously monitored the Entry Descent and Landing (EDL) events of the Mars Science Laboratory (MSL) Mission. Ultimately, the MSL spacecraft that carried the Curiosity rover succeeded in every step of the most complex landing ever attempted on Mars, including the final severing of the bridle cords and flyaway maneuver of the rocket backpack. During the entire landing sequence, Curiosity was constantly transmitting data to three orbiting Mars spacecraft as well as tracking stations back on Earth—relaying its progress every step of the way. After almost three months on the surface, Curiosity has already returned fascinating images and data from the Red Planet. As the lead engineer for EDL telecommunications, Brian Schratz will present an overview of the MSL mission, EDL telecom, and a first-hand account of what it was like to work in mission control that night.

Brian Schratz presents an overview of Mars Science Laboratory Mission, Entry Descent and Landing telecom, and his first-hand account of working in Mission Control on August 5, 2012.

Brian Schratz was the lead engineer for the Entry Descent and Landing (EDL) telecommunications on NASA's Mars Science Laboratory mission, which safely delivered the *Curiosity* rover to the surface of Mars on August 5, 2012.

Mr. Schratz received his Bachelors of Science in Electrical Engineering, with honors, from The Pennsylvania State University in 2006. He received his M.S. in E.E. from Penn State in 2008 as a fellow of NASA's Graduate Student Research Program. As a student, he led and/or developed instruments for several balloon, rocket, and satellite projects. Mr. Schratz was a member of the Tau Beta Pi National Engineering Honors Society and the Eta Kappa Nu International Honors Society for Electrical and Computer Engineers. Prior to joining JPL full-time in 2009, he completed a Fulbright fellowship in Norway.



For more information, please see casgc.ucsd.edu or call 858-822-1597.