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7:00 – 8:00 PM

LSC 100 - LSC Arvo J. Oopik 1978 Auditorium
Class of 1978 Life Sciences Center

A Flight of Curiosity – a Mathematician's Tale

On August 5, 2012, scientists and space enthusiasts from around the world held their breath and watched in real time as the Curiosity rover plunged through the thin atmosphere of Mars to its targeted landing site inside Gale Crater. We rejoiced as the words from mission control announced “We are safe on Mars.”

A lot of things had to happen before the first pictures were broadcast from Gale crater. A group of scientists had to formulate a mission. NASA had to approve and authorize funding for the mission. A small army of scientists, engineers and support staff were assembled to build and test the vehicle, its instruments and the software to control them. A group of physicists, astrodynamists, and mathematicians had to plan the route from Cape Canaveral to a safe landing site inside Gale Crater.

Woven through all of this activity is mathematics. Indeed, without it and associated mathematical software, a flight to Mars would be impossible.

In this talk we'll take a tour through some of the mathematics that makes humankind's expeditions to the planets possible.

