

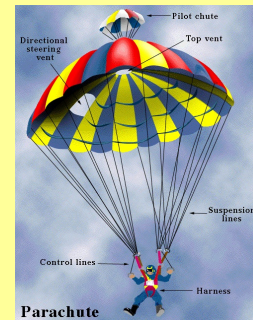
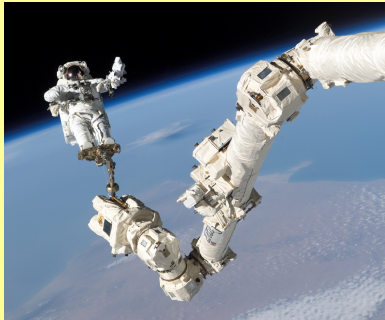
Sensing Our World 2015

SOW at Notre Dame, 6-10 July 2015 or 13-17 July

The Summer Science Program for Middle School Students

The Science of Flight - Rockets, Drones, Space...

A week of Hands-On Science Learning



This year, students will learn the science behind the successful flights of birds and humans - the students will be building their own models to test their ideas of the many physical forces involved - with a focus of understanding the physics of the forces required for their successes. Each day, the students, working in groups on their own models will end by competing with each other. The experiments will range from paper airplane dynamics (gliders), to solid fuel powered rocketry, parachutes, helicopters and finally to quadcopters (drones). Model testing will include building wind-tunnels. We **emphasize learning through enjoyment and purposeful improvement**. The final afternoon, open to parents and the public, will showcase their learning.

Many science faculty at the University of Notre Dame are now linked to relevant application developments as headed by our *Office of Technology Transfer*. Visits and presentations may include, for example:

- The *Notre Dame Air Force ROTC*, established in 1947 prepares young men and women to become leaders in the Air Force, and provides college scholarships.
- The *Hessert Laboratory for Aerospace Research* at Notre Dame includes the Plasma Flow Control Laboratory, an anechoic chamber, a Mach .05 low-disturbance wind tunnel, an atmospheric wind tunnel, a planar jet facility, high-speed supersonic and transonic wind tunnels,
- *The Innovation Park*, which provides “laboratory, collaborative space, support services, and commercialization network to foster all types of ventures in various stages of development.”;
- *The ESTEEM program*, “an innovative 11-month Professional Master’s Program designed to surround individuals with STEM background in an entrepreneurial ecosystem allowing them to take university technologies from concept to market.”

If you know a student who might be interested in joining this chance to participate in hands-on science learning from Notre Dame scientists, please suggest they visit the NISMEC website for further information and for the application forms

NISMEC: <http://www3.nd.edu/~nismec/nismec11.htm>