



American Institute of
Aeronautics and Astronautics
Dayton-Cincinnati Section

Lunch 'n' Learn

From low-speed to hypersonic aerodynamics using
ANSYS CFD

Guest Speaker:

Dr. Valerio Viti



Friday 27 July 2018; 11:45 AM

Abstract: Computational Fluid Dynamics tools have been used by the scientific community for over four decades to design and analyze the aerodynamic performance of bodies immersed in fluids. In some of these applications it is the body that moves through the fluid, such as in the case of an aircraft, while some other times the fluid moves around the solid body, such as in the case of building aerodynamics or electronics cooling. While the overarching CFD modeling approach to all these flowfields is similar, as usual the devil is in the details, and the numerical and physical considerations that work for one flowfield might vary greatly to work in another application. This talk will discuss how modern-day CFD tools are being used by industry and R&D institutions to model the wide array of flow regimes that engineers are called upon to understand and analyze. Several industry examples will be shown, spanning from low-speed incompressible flows of wind flow around a building all the way to the high-speed reacting flows of an atmospheric re-entry vehicle.

Biography: Valerio Viti is a senior CFD specialist at Ansys. Valerio has been with ANSYS for 12 years working in the Aerospace and Defense and Power generation industries. Valerio holds a PhD in Aerospace Engineering from Virginia Tech, 2002.

Location

China Garden Buffet
Airway Center
112 Woodman Drive
Dayton OH 45432

Lunch

You will be able to
purchase the buffet.

