Weekly CEAFM Seminar: Fall 2016

JOHNS HOPKINS
Center for Environmental
& Applied Fluid Mechanics

Date: **Friday, September 30, 2016**

Time: 11:00 AM

Location: Gilman Hall # 50

Speaker: **Prof. Scott C. Morris** (University of Notre Dame)

Title: ***"Flow Physics in a Gas-Turbine Engine"***

Abstract

Gas-turbine engines are the basis for much of our land-based power generation, and provide propulsion for nearly all modern aviation. Engineering advancements over the last 50 years have resulted in engines that are safe, efficient, and economical. Current research efforts are guided towards continued improvements to engine capability and fuel consumption. This talk will describe several current efforts involving internal aerodynamics that are helping to improve engine components through experiments and computational tool development. This will include a discussion of turbulent boundary layer flows, fan acoustics, compressor stall, fractal grid turbulence, and turbine aerodynamics.

Bio

Scott Morris completed his Ph.D in mechanical engineering at Michigan State University in 2002. He was then appointed to the faculty in the Department of Aerospace and Mechanical Engineering at the University of Notre Dame. Dr. Morris directs research in the areas of fluid mechanics, acoustics, and turbomachinery.