

Turbomachinery CFD @ GE

AIAA Future CFD Workshop

January 6-7, 2018

Dr. Brian E. Mitchell

Senior Principal Engineer GE Global Research

Abstract

CFD is a key technology enabler for obtaining improved performance for land-based and airborne turbomachinery engines at GE. We will present the state-of-the-art ways GE utilizes CFD in the design process for turbomachinery blade rows as well as the complementary strategies related to high performance computing. We will discuss the interplay between RANS and LES in the engineering process and will close with a discussion of future challenges and opportunities for research to impact industrial CFD.