

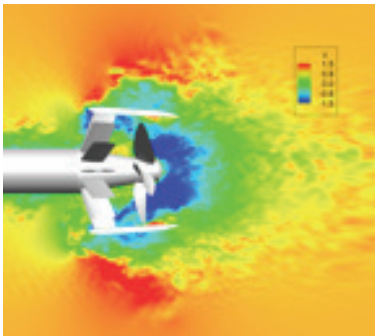
THE WILLIAM E. BOEING DEPARTMENT OF **AERONAUTICS & ASTRONAUTICS**

... welcomes ...

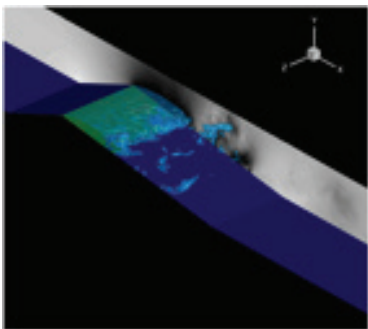
KRISHNAN MAHESH

UNIVERSITY OF MINNESOTA

The simulation and modeling of turbulent flows



Our group at the University of Minnesota focuses on fundamental advances in numerical algorithms, and understanding of flow physics that allow the prediction of engineering turbulent flows. This presentation will discuss key aspects of such simulation alongside illustrative examples. Special attention has been paid to ensuring robustness and accuracy at high Reynolds numbers without numerical dissipation. The basic ideas behind this methodology will be discussed. The predictive capability of LES will be demonstrated for complex problems; e.g. propeller crashback, cavitation and hydroacoustics. LES results will be shown to be in good agreement with experiments and used to discuss aspects of the underlying physics.



Computational Fluids Laboratory
<http://www.aem.umn.edu/~kmahesh/>



WILLIAM E. BOEING
DEPARTMENT OF AERONAUTICS & ASTRONAUTICS
UNIVERSITY of WASHINGTON

Monday, April 3, 2017 @ 4:00pm
Johnson Hall. Rm 102 | UW Seattle

Visitor RSVP:
<https://goo.gl/forms/W0g9bjd4bFPLWFi2>

THE WILLIAM E. BOEING DEPARTMENT OF
AERONAUTICS & ASTRONAUTICS

... Distinguished Guest Speaker ...



KRISHNAN MAHESH
UNIVERSITY OF MINNESOTA

*Professor Aerospace Engineering
and Mechanics*

EDUCATION

Stanford University
Ph.D Mechanical Engineering (1996)
M.S. Mechanical Engineering (1990)

Indian Institute of Technology, Bombay
B. Tech. Mechanical Engineering (1989)

WORK EXPERIENCE

University of Minnesota
Professor, 09/09 - Present
Associate Professor, 09/05 - 09/09
Assistant Professor, 11/00 - 09/05

Center for Turbulence Research, Stanford
Research Associate, 06/97 - 10/00
Postdoctoral fellow, 06/96 - 05/97

HONORS AND AWARDS

Fellow, American Physical Society (2011)
Taylor Award for Distinguished Research, University of Minnesota (2010)
Associate Fellow, American Institute of Aeronautics & Astronautics (2009)
Fellow, Minnesota Supercomputing Institute (2005)
McKnight Presidential Fellowship Award, University of Minnesota (2005)
Guillermo Borja Award, University of Minnesota (2005)
McKnight Land-Grant Professorship, University of Minnesota (2003)
CAREER Award, National Science Foundation (2002)
Francois N Frenkiel Award, American Physical Society (1997)
Institute Silver Medal, Indian Institute of Technology, Bombay (1989)



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