

## Curriculum Vitae

### **PROF. ROBERT D. MOSER**

Department of Theoretical and Applied Mechanics  
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#### **EDUCATION**

Ph.D. in Mechanical Engineering, 1984. Stanford University. Dissertation topic: "Direct numerical simulation of curved turbulent channel flow," Adviser: Parviz Moin

M.S. in Mechanical Engineering, 1981. Stanford University.

B.S. in Mechanical Engineering, 1978. Mass. Institute of Technology.

#### **PROFESSIONAL POSITIONS**

6/95-Pres. : Professor of Theoretical and Applied Mechanics, University of Illinois, Urbana, IL.

1/02-6/02 : Visiting Professor, Universidad Politecnica de Madrid, Madrid SPAIN.

8/99-8/00 : Interim Head, Department of Theoretical and Applied Mechanics, University of Illinois, Urbana, IL.

4/87-6/95 : Research Scientist, NASA Ames Research Center, Moffett Field CA.

4/85-4/87 : Reservoir Engineer, Sohio Petroleum Co., Dallas, TX.

6/84-4/85 : Research Scientist, NASA Ames Research Center, Moffett Field CA.

6/78-6/80 : Analytical Engineer, Hamilton Standard, Windsor Locks CT.

#### **RECENT RESEARCH ACTIVITIES**

Research interests include: 1) Fundamental studies of turbulence using direct numerical simulations. Recent studies have included: investigation of the non-uniqueness and self-similar scaling of turbulent free shear flows, studies of compressibility effects in wall-bounded turbulent flows, investigation of high-Reynolds number scaling of wall-bounded turbulence. 2) Development of large eddy simulation (LES) formulations. 3) Development of high resolution numerical methods for use in computational mechanics. 4) Development of high fidelity numerical models of complex multi-scale multi-physics systems. Specific applications include solid propellant rockets, and the cardiovascular system. Also direct the fluid dynamics group of the Center for Simulation of Advanced Rockets, a DOE ASCI ASAP center. Recent research has been supported by AFOSR, DOE, NASA and NSF.

#### **MAJOR AWARDS**

1995 NASA Medal for Exceptional Scientific Achievement

Fellow of American Physical Society

Co-Recipient (with R. Adrian) of an Arnold O. Beckman Research Award (1999).