

ASME International

Mechanical Engineering Congress & Exposition

November 15–21, 2013 San Diego, California USA



PROGRAM Includes Exposition Directory

TRACK 8 FLUIDS ENGINEERING SYSTEMS & TECHNOLOGIES / MONDAY, NOVEMBER 18

8-5 14TH SYMPOSIUM ON FUNDAMENTAL ISSUES AND PERSPECTIVES IN FLUID MECHANICS

8-6 SYMPOSIUM ON CFD APPLICATIONS FOR **OPTIMIZATION AND CONTROLS**

8-5-1 Turbulence Modeling and Applications

2nd Floor, Manchester Grand Hyatt, Betsy C

9:45am-11:30am

Session Organizer: Deify Law, California State University, Fresno, Fresno, CA, United States

Session Co-Organizer: Khaled Hammad, Central Connecticut State University, Simsbury, CT, United States

8-6-1 CFD Applications for Optimization and Controls I

9:45am-11:30am 2nd Floor, Manchester Grand Hyatt, Edward A

Session Organizer: Zhongquan Zheng, University of Kansas, Lawrence, KS, United States Session Co-Organizer: Ning Zhang, McNeese State University, Lake Charles, LA, United States

9:45am Application of a Novel Approach for Turbulence **Model Initialization**

Technical Presentation. IMECE2013-65771

Bertrand Rollin, Nicholas A. Denissen, Jon M. Reisner, Malcolm Andrews, Los Alamos National Laboratory, Los Alamos, NM, United States

10:02am Dynamic Modeling of Turbulence Technical Paper Publication. IMECE2013-62330 Abdel Mazher, Changki Mo, Washington State University, Richland, WA, United States

10:19am Some Results of Statistical Modeling of the Small-Scale Structure of Turbulent Flows Revealed With **Consideration of Intermittency** Technical Paper Publication. IMECE2013-62645 Yuriy Nuzhnov, Al-Farabi Kazakh National University, Combustion Problems Institute, Almaty, Kazakhstan

High Fidelity Simulation of Multiscale Turbulent Flows 9:45am in the Environment Invited Presentation. IMECE2013-67381 Sutanu Sarkar, University of California, La Jolla, United States

10:15am Study of Turbulent Incompressible Flow Separation on High Lift Devices Using CutCell Meshing Technical Paper Publication. IMECE2013-62623 Ramadan Ghmatl, Tripoli University, Tripoli, Libya, Selin Arslan, Badih Jawad, Liping Liu, Lawrence Technological University, Southfield, MI, United States

10:30am Three-Dimensional Mesh Morphing Methodology for Scouring Around Bridge Piers Based on **Computational Fluid Dynamic Solution** Technical Paper Publication. IMECE2013-62278 Pradip Majumdar, Chris Edwards, Northern Illinois University, DeKalb, IL, United States, Steven Lottes, Argonne National Laboratory, Lemont, IL, United States

10:36am Mach Number on Outlet Plane of a Straight Micro-Tube

Technical Paper Publication. IMECE2013-64188 Yutaka Asako, Daisuke Kawashima, Tokyo Metropolitan University, Hachioji Tokyo, Japan, Toru Yamada, Lund University, Lund, Sweden, Chungpyo Hong, Kagoshima University, Kagoshima, Japan

10:53am LES Investigation of Passive Flow Control Around an Ahmed Body

Technical Paper Publication. IMECE2013-62373 Sinisa Krajnovic, Chalmers University of Technology, Göteborg, Sweden

11:10am Numerical Investigation of the Flow Instability on the Rear of a Vehicle-Like Bluff Body Technical Presentation. IMECE2013-62337 Sinisa Krajnovic, Chalmers University of Technology, Göteborg,

10:45am Effect by Guide Vane Swirl and Tumble Device to Improve the Air-Fuel Mixing of Diesel Engine Running With Higher Viscous Fuels Technical Paper Publication. IMECE2013-62297 Idris Saad, Universiti Teknologi MARA, University of South Australia, Shah Alam, Selangor, Malaysia, Saiful Bari, University of South Australia, Adelaide, Australia

11:00am New Curve Optimization Method and Its Application to Shape Design for Die Casting Using a CFD Simulation

Technical Paper Publication. IMECE2013-62541 Ken'ichi Kanazawa, Ken'ichi Yano, Mie University, Tsu, Mie, Japan, Jun'ichi Ogura, Yamaha Motor Co., Ltd., Iwata, Shizuoka, Japan, Shuhei Baba, Flow Science Japan, Inc., Hamamatsu, Shizuoka, Japan

Sweden