

TENTH SYMPOSIUM ON TURBULENCE

Sunday, September 21, 1986

7:00-10:00 p.m. Registration and Social Hour, Zeno's Motel and Steak House,
Rolla, Missouri

Monday, September 22, 1986

7:30-8:30 a.m. Late Registration -- Miner Lounge, University Center-East, UMR

8:30 a.m. Symposium Opening -- Centennial Hall-West

8:35 a.m. Welcoming Remarks, Dr. Martin Jischke, Chancellor, UMR

8:45 a.m. Announcements and General Information

Monday (cont.)

COHERENCE IN TURBULENCE - Centennial Hall-West
Session Chairman - A.K.M.F. Hussain

Paper
Number

- | | |
|---|---|
| Invited Lecturers - Hassan Mahmoud Nagib, Illinois Institute of Technology,
and Yann G. Guezennec, The Ohio State University, "On Coherent Large Scale
Structures in Turbulent Boundary Layers and Their Suppression" | 1 |
| R. Erbeck and W. Merzkirch, Universität Essen, Republic of Germany,
"Speckle Photographic Measurement of Turbulence in an Air Stream With
Fluctuating Temperature" | 2 |
| N. Toy and C. Wisby, University of Surrey, Guildford, United Kingdom,
"A Preliminary Investigation of Real-Time Image Analysis of a Visualized
Turbulent Wake" | 3 |
| Thomas B. Francis and Joseph Katz, Purdue University, "The Study of the
Flow Structure of Tip Vortices on a Hydrofoil" | 4 |
| H. Maekawa, T. Nozaki, M. Tao and S. Yamazaki, Kagoshima University,
Kagoshima, Japan, "Visualized Large-Scale Motions in the Turbulent Wake
Behind a Thin Symmetrical Airfoil" | 5 |
| J.T. Kegeleman, McDonnell Douglas Research Laboratories, "A Flow-Visualization
Technique for Examining Complex Three-Dimensional Flow Structures" | 6 |
| J.T. Kegeleman and F.W. Roos, McDonnell Douglas Research Laboratories,
"Spanwise Coherence of Vortical Structures in a Reattaching Turbulent Shear
Layer" | 7 |
| C.C. Chu and R.E. Falco, Michigan State University, "A Vortex Ring/Viscous
Wall Layer Interaction Model of the Turbulence Production Process Near Walls" | 8 |
| Stephen K. Robinson, NASA Ames Research Center, "Large-Eddy Detection in a
Supersonic Turbulent Boundary Layer" | 9 |

Charles G. Speziale, Georgia Institute of Technology, "On the Decomposition of Turbulent Flow Fields for the Analysis of Coherent Structures"	10
J. Swirydczuk, Polish Academy of Sciences, Gdansk, Poland, "Formation of a Concentrated Vortex Structure Induced by an Interaction of a Single Vortex with Unsteady Vortex Layer Shedding from an Airfoil"	11
NUMERICAL SIMULATION AND MODELING - Centennial Hall-West Session Chairman - M.M. Reischmann	
Invited Lecturers - J.R. Herring, National Center for Atmospheric Research and Olivier Metais, NCAR, Advanced Program and CNRS, Grenoble, France, "Numerical and Theoretical Calculations of Stratified Turbulence"	12
V. Eswaran and S.B. Pope, Cornell University, "An Examination of Forcing in Full Turbulence Simulations"	13
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Karam Azab and John B. McLaughlin, Clarkson University, "Numerical Simulation of the Viscous Wall Region"	15
F.F. Grinstein, Berkeley Research Associates, E.S. Oran and J.P. Boris, U.S. Naval Research Laboratory, and A.K.M.F. Hussain, University of Houston, "Numerical Study of the Mean Static Pressure Field of an Axisymmetric Free Jet"	16
L. Shtilman, City College of the City University of New York, R.B. Pelz, Rutgers University, A. Tsinober, Tel Aviv University, Tel Aviv, Israel, "Numerical Investigation of Helicity in Turbulent Flow"	17
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NOVEL EXPERIMENTAL APPROACHES - Centennial Hall-West Session Chairman - W.G. Tiederman	
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