

	Room 1, Instability Chairman: A.Person	Room 2, Control and drag reduction Chairman: B.Person	Room 3, Biological flows Chairman: C.Person	Room 4, Compressible flows Chairman: D.Person
14:00	Experimental study of Richtmyer-Meshkov instability induced by a non-uniform shock wave <u>S. LIAO</u> , L. ZOU, H. CHEN, J. LIU.	Study of Sub- and Supersonic Flow Control with Dielectric Barrier Discharge Plasma Actuator <u>B. KHOO</u> , Y. CUI, J. ZHENG.	Highly flexible filaments in an oscillatory microchannel flow <u>S. PAWLOWSKA</u> , F. PIERINI, T. KOWALEWSKI.	Effect of thermo-mechanical non-equilibrium on the onset of transition in supersonic boundary layers <u>S. SHARMA</u> , M. SHADLOO, A. HADJADJ.
14:15	Effects of thermodynamic profiles on developments of supersonic Batchelor vortices <u>T. HIEJIMA</u> .	Improved efficiency of a self-propelled pitching airfoil using non-sinusoidal trajectory <u>M. MAHMOUD</u> , C. ELHACHEMI, O. HAMID, H. SAMIR.	Machine learning the space-time phase diagram of bacterial collective swimming H. JECKEL, E. JELLI, R. HARTMANN, P. SINGH, R. MOK, J. TOTZ, B. ECKHARDT, J. DUNKEL, <u>K. DRESCHER</u> .	Evolution of irregular shock structures in supersonic co-flows <u>C. HUETE</u> , D. MARTÍNEZ-RUIZ, P. MARTÍNEZ-FERRER, D. MIRA.
14:30	Bifurcation analysis of laterally heated buoyant convection in low-Prandtl number fluids <u>A. MEDELFEF</u> , D. HENRY, A. BOUABDALLAH, S. KADDECHE.	Natural Drag Reducing Agents in Oil-water Flows <u>L. EDOMWONYI-OTU</u> , N. YUSUF, N. ABDALLAH, M. ISMAIL.	Experimental study on the multi-pulse Nd:YAG laser induced vesicle embolization of PWS lesions <u>H. JIA</u> , B. CHEN, L. XING, D. LI.	Numerical simulation of over-expanded separated flow in a truncated ideal contour rocket nozzle <u>E. MARTELLI</u> , M. BERNARDINI, P. CIOTTOLI, L. SACCOCCIO, M. VALORANI, C. TINNEY, J. VALDEZ, W. BAARS, J. RUF.
14:45	Effect of surface roughness on the vortex-induced instability of a wall-bounded shear layer <u>A. SENGUPTA</u> , R. GARCIA-MAYORAL, V. SUMAN.	Active jet control of flow around a circular cylinder <u>D. GAO</u> .	Magnetic field interaction with blood flow and heat transfer through diseased artery having abdominal aortic aneurysm <u>S. MAJEE</u> , G. SHIT.	Mitigation of Transmitted Wave of Shock Wave <u>S. KOBAYASHI</u> , H. HEMMI.
15:00	Second-order sensitivity and influence of optimally forced nonlinear streaks on the Kelvin-Helmholtz instability M. MARANT, <u>C. COSSU</u> .	Effects of streamwise elongated and spanwise periodic surface roughness elements on boundary layers <u>C. KATAL</u> , X. WU.	Fluid dynamics of the bacterial motor <u>D. DAS</u> , E. LAUGA.	Numerical Simulation on the Mechanism of SWBLI in Hypersonic Interaction Region <u>C. WANG</u> , R. YANG, G. XIANG, Z. JIANG.
15:15	Simulations of hydrodynamic instability in ICF implosions <u>Z. FAN</u> .	A numerical study on the effectiveness of shallow dimples for turbulent drag reduction via large-eddy simulations <u>J. NG</u> , R. JAIMAN, T. LIM.	Mechanics of bacterial flagellar bundles <u>M. TĂTULEA-CODREAN</u> , E. LAUGA.	Starting Process in a Large-Scale Hypersonic Shock Tunnel <u>Y. WANG</u> , Z. JIANG.
15:30	Nonlinear evolution of long-wave Marangoni convection in the presence of insoluble surfactant A. MIKISHEV, <u>A. NEPOMNYASHCHY</u> .	Solution to shape design problems of unsteady forced heat-convection fields <u>E. KATAMINE</u> , N. OKADA.	An stochastic fluid dynamic model for bacteria-driven microswimmers <u>C. ESPARZA LÓPEZ</u> , E. LAUGA.	High-Velocity Compressible Gas Flow Pressure Drop in Rupture Disk Relief Lines <u>M. MUTEGLI</u> , J. SCHMIDT, J. DENECKE, S. RÜSENBERG.
15:45	Various routes of receptivity in a hypersonic blunt cone boundary-layer to slow acoustic wave B. WAN, <u>C. SU</u> .	Parametric study of the Dielectric Barrier Discharge plasma actuator in quiescent air: scaling laws and induced airflow. <u>S. GROSSE</u> , D. ANGLAND.	Hydrodynamics of bacteriophages <u>P. KATSAMBA</u> , E. LAUGA.	Fanno flows in micro-channels: an enhanced quasi-2D laminar numerical model for gas flow <u>M. CAVAZZUTI</u> , M. CORTICELLI, T. KARAYIANNIS.

	Room 1, Aeroacoustics Chairman: A.Person	Room 2, Control and drag reduction Chairman: B.Person	Room 3, Biological flows Chairman: C.Person	Room 4, Compressible flows Chairman: D.Person
14:00	Hybrid aeroacoustics using Helmholtz decomposition <u>S. SCHODER</u> , M. KALTENBACHER.	Study of Sub- and Supersonic Flow Control with Dielectric Barrier Discharge Plasma Actuator <u>B. KHOO</u> , Y. CUI, J. ZHENG.	Highly flexible filaments in an oscillatory microchannel flow <u>S. PAWLOWSKA</u> , F. PIERINI, T. KOWALEWSKI.	Effect of thermo-mechanical non-equilibrium on the onset of transition in supersonic boundary layers <u>S. SHARMA</u> , M. SHADLOO, A. HADJADI.
14:15	Influence of weak adverse pressure gradient on tonal noise radiation from a protuberance in a laminar boundary layer <u>T. ABO</u> , M. ASAI, S. TAKAGI.	Improved efficiency of a self-propelled pitching airfoil using non-sinusoidal trajectory <u>M. MAHMOUD</u> , C. ELHACHEMI, O. HAMID, H. SAMIR.	Machine learning the space-time phase diagram of bacterial collective swimming H. JECKEL, E. JELLI, R. HARTMANN, P. SINGH, R. MOK, J. TOTZ, B. ECKHARDT, J. DUNKEL, <u>K. DRESCHER</u> .	Evolution of irregular shock structures in supersonic co-flows <u>C. HUETE</u> , D. MARTÍNEZ-RUIZ, P. MARTÍNEZ-FERRER, D. MIRA.
14:30	Sound generation by entropy perturbations passing through short circular holes <u>D. YANG</u> , J. GUZMAN, A. MORGANS.	Natural Drag Reducing Agents in Oil-water Flows <u>L. EDMOWONYI-OTU</u> , N. YUSUF, N. ABDALLAH, M. ISMAIL.	Experimental study on the multi-pulse Nd:YAG laser induced vesicle embolization of PWS lesions <u>H. JIA</u> , B. CHEN, L. XING, D. LI.	Numerical simulation of over-expanded separated flow in a truncated ideal contour rocket nozzle <u>E. MARTELLI</u> , M. BERNARDINI, P. CIOTTOLI, L. SACCOCCIO, M. VALORANI, C. TINNEY, J. VALDEZ, W. BAARS, J. RUF.
14:45	On the vortical-acoustic coupling in short circular holes <u>J. GUZMAN INIGO</u> , D. YANG, H. JOHNSON, A. MORGANS.	Active jet control of flow around a circular cylinder <u>D. GAO</u> .	Magnetic field interaction with blood flow and heat transfer through diseased artery having abdominal aortic aneurysm <u>S. MAJEE</u> , G. SHIT.	Mitigation of Transmitted Wave of Shock Wave <u>S. KOBAYASHI</u> , H. HEMMI.
15:00	Numerical simulation of acoustic propagation in a turbulent spatial channel flow with acoustic liner <u>R. SEBASTIAN</u> , D. MARX, V. FORTUNÉ.	Effects of streamwise elongated and spanwise periodic surface roughness elements on boundary layers <u>C. KATAI</u> , X. WU.	Fluid dynamics of the bacterial motor <u>D. DAS</u> , E. LAUGA.	Numerical Simulation on the Mechanism of SWBLI in Hypersonic Interaction Region <u>C. WANG</u> , R. YANG, G. XIANG, Z. JIANG.
15:15	Sound radiated by the interaction of rectangular jet with the leading/trailing edges of a semi-infinite flat plate <u>M. AFSAR</u> , V. SASSANIS, A. SESCU.	A numerical study on the effectiveness of shallow dimples for turbulent drag reduction via large-eddy simulations <u>J. NG</u> , R. JAIMAN, T. LIM.	Mechanics of bacterial flagellar bundles <u>M. TATULEA-CODREAN</u> , E. LAUGA.	Starting Process in a Large-Scale Hypersonic Shock Tunnel <u>Y. WANG</u> , Z. JIANG.
15:30	The Suppression of Cavity Noise with the Application of Effective Passive Control Methods O. DEMIR, O. DEMIRCAN, S. TURK, <u>K. GÜLEREN</u> .	Solution to shape design problems of unsteady forced heat-convection fields <u>E. KATAMINE</u> , N. OKADA.	An stochastic fluid dynamic model for bacteria-driven microswimmers <u>C. ESPARZA LÓPEZ</u> , E. LAUGA.	High-Velocity Compressible Gas Flow Pressure Drop in Rupture Disk Relief Lines <u>M. MUTEGI</u> , J. SCHMIDT, J. DENECKE, S. RÖSENBERG.
15:45	Aeroacoustics Analysis of Active Control Methods with Moving Flaps and Spoilers for the Transonic and Supersonic Cavity Flows O. DEMIRCAN, O. DEMIR, S. TURK, <u>K. GÜLEREN</u> .	Parametric study of the Dielectric Barrier Discharge plasma actuator in quiescent air: scaling laws and induced airflow. <u>S. GROSSE</u> , D. ANGLAND.	Hydrodynamics of bacteriophages <u>P. KATSAMBA</u> , E. LAUGA.	