

15th IBCAST 2018: Fluid Dynamics Activity (Technical Program)

Overview

		09:30– 12:50								14:00– 16:30									
Day-1 January 09,2017 Tuesday	REGISTRATION												Invited Talk	FD Paper					
													Prof Dr. Laurent Dala.	18FD 90	18FD 671	18FD 60	18FD 325	18FD 667	18FD 117
Day-2 January 10,2017 Wednesday	Invited Talk	FD Papers			T E A	FD Papers				Invited Talk	FD Paper								
	Prof Dr. Ismail H. TUNCER.	18FD 161	18FD 30	18FD 172		18FD 88	18FD 68	18FD 15	18FD 503	Dr. Imran Akhtar.	18FD 23	18FD 244	18FD 504	18FD 583	18FD 457				
Day-3 January 11,2017 Thursday	Li Shipeng.	18FD 582	18FD 490	18FD 332		18FD 408	18FD 255	18FD 283	18FD 10	Workshop: Gradient Based Aerodynamic Shape Optimization with a Panel Code. Prof Dr. Ismail H. TUNCER.									

Day 1: January 09, 2017.

09:30-1:00	REGISTRATION + INAUGURAL CEREMONY (FOLLOWED BY Hi Tea for guests)	
1:00-2:00	LUNCH	
(SESSION-I Chaired by Prof Dr. Ismail H. TUNCER)		
2:00 – 2:40 Invited Talk	Shock Wave Reduction around a Blunt Body using Passive Flow Control Techniques and a New Active Flow Control Technique (Technology Disclosure)	Prof Dr. Laurent Dala
2:40 – 3:00	18FD90 Modelling and Aerodynamic predication of Fish Bone Active Camber Morphing Airfoil	Hao Zhou (China)
3:00 – 3:20	18FD671 Aerodynamic Force and Power for Flapping Wing at Low Reynolds Number in Ground Effect	Farooq Umar (China)
3:20 – 3:40	18FD60 Computational Fluid Dynamics Analysis of IPMC Actuated Mechanical Fin through Two-way Fluid Structure Interaction Approach	Mazhar Ul Haq (China)
3:40 - 4:00	18FD325 Flutter Analysis of ARW-2 Wing using Doublet Lattice.	M. Junaid Aziz (CESAT)
4:00 – 4:20	18FD667 Numerical Investigation of Breathing in a Long Blunt Nosed Body at Supersonic Speed	Naveed Akram (CESAT)
4:20 – 4:40	18FD117 The heat transfer of a cylinder submerged in the wake of another of different diameters	Muhammad Farhan Zafar (China)

Day 2: January 10, 2017.

(SESSION-I Chaired by Li Shipeng)		
9:30 – 10:10 Invited Talk	Wind Power Estimation based on Unsteady OpenFOAM Solutions Coupled with WRF	Prof Dr. Ismail H. TUNCER
10:10 – 10:30	18FD161 Unsteady Numerical Simulation of a Three Stage Compressor Using Multi-frequency Phase Lag Method	Rongfei Yang (China)
10:30 -10:50	18FD30 Numerical Study on the Stall Process of a Low Speed Axial Compressor Rotor	Zhiqiang Wang (China)
10:50 – 11:10	18FD172 Computation Analysis of PT/CT Contact Behavior for a Heavy Water Reactor at High Temperature and Pressure	Rashid Ali (KIPE)
11:10 – 11:30	T E A	
(SESSION-II Chaired by Dr. Imran Akhtar)		
11:30 – 11:50	18FD88 The effects of shear flows on thermal instability of viscoelastic fluids in a fluid-porous system	Chen Yin (China)
11:50 - 12:10	18FD68 Influence of heat transfer on the peristaltic transport of Herschel-Bulkley fluid in a compliant channel	Tasib Iqbal (IST)
12:10 – 12:30	18FD15 Numerical Investigation of Unsteady Flow Interactions in a Transonic Single Stage High Pressure Turbine	Muhammad Afzaal Asghar (China)
12:30 – 12:50	18FD503 Investigation on Coanda Gap variable-camber Inlet Guide Vanes for Core Driven Fan Stage	Baofeng Tu (China)
12:50 – 2:00	LUNCH	
(SESSION-III Chaired by Prof Dr. Laurent Dala)		
2:00 – 2:40 Invited Talk	On Nonlinear Analysis of Flapping Hydrodynamics: Thrust Augmentation in Fish Schooling.	Dr. Imran Akhtar
2:40 – 3:00	18FD23 Analysis on Drag Characteristic of Busemann-type Biplane	Hongyu Zhu (China)
3:00 – 3:20	18FD244 Aeroacoustics analysis of 2D airfoil of UAV wing with different Flap and Leading Edge Slat configurations	Mirza Ali Aamir (NUST)
3:20 – 3:40	18FD504 Numerical simulation of circulation control airfoil using RANS solver	Ali Abbas Zaidi (NUST)
3:40 - 4:00	18FD583 Estimation of Pressure field and maximum velocity of an Oseen Vortex	Musawar Hussain (NUST)
4:00 – 4:20	18FD457 Study of Aerodynamic Coefficients Dependency on Reynolds Number for Subsonic Flow Conditions	Anum Zia (IST)

Day 3: January 11, 2017.

(SESSION-I Chaired by Prof Dr. Ismail H. TUNCER)		
9:30 – 10:10 Invited Talk	Numerical investigation on supersonic jet flow field for deep undersea UAV propulsion.	Li Shipeng
10:10 – 10:30	18FD582 Analysis of Distribution of Feed Water through J Tubes in Feed Water Ring of Chashma Nuclear Power Plant	Farooq Khan Khalil (PIEAS)
10:30 – 10:50	18FD490 Design and Development of Low-speed Water Tunnel	Mujahid Saeed (NUST)
10:50 – 11:10	18FD332 The Application of Particles Image Velocimetry Technique in The measurement of SteadyState Flow velocity fields for Coolant of a Model of Reactor Vessel Downcomer	Abdelgadir Eltayeb. A. Mohammed (China)
11:10 – 11:30	T E A	
(SESSION-II Chaired by Li Shipeng)		
11:30 – 11:50	18FD408 Evaluation of thrust from a multi-nozzle output device with single input	M Javed Hyder (PIEAS)
11:50 - 12:10	18FD255 Effect of Turbulence Modelling on Realistic Estimation of Flow Characteristics of Liquid Ejector Pump	Syed Qasim Zaheer (NUST)
12:10 – 12:30	18FD283 Particles Order-disorder in Complex (Yukawa) Fluids Using Molecular Dynamics Simulations	Aamir Shahzad (GCUF)
12:30 – 12:50	18FD10 Combined Heat and Mass Transfer in MHD Three Dimensional Porous Flow with Periodic Permeability and Heat Absorption	Rabiya Tajammal (RIU)
12:50 – 2:00	LUNCH	
(SESSION-III Chaired by Prof Dr. Laurent Dala)		
2:00 – 4:30 Workshop	Gradient Based Aerodynamic Shape Optimization with a Panel Code	Prof Dr. Ismail H. TUNCER