

Monday 1 July 2024

08:30	Registration desk open	
9:00 - 9:30	Welcome	
Keynote 9:30 - 10:30	Overpressure and Impulse: Are these the only parameters available to obtain the equivalent TNT? An experimental and numerical study	Hugo Bento Rebelo
10:30 - 10:50	Wave diffractions over a cavity	S Vishnu Prasad, Rajesh G, Anbu Serene Raj C and Vinoth P
10:50 - 11:10	On the Shock Wave Propagation Dynamics Following Sudden Area Expansion	Yoav Gichon, Jibu Tom Jose, Hemanth Chandravamsi, Yigal Evron and Omri Ram
11:10 - 11:30	Coffee break	
11:30 - 11:50	Shock Wave Propagation with Shear-layer and Surface Interaction during Transonic Deceleration	Irshaad Mahomed, Hamed Roohani, Irvy M.A. Gledhill and Beric W. Skews
11:50 - 12:10	Shock Wave Interaction Characteristics produced by Liquid Jet Injection in a Supersonic Crossflow	Srinivas M V V and Arun Kumar R
12:10 - 12:30	Effect of Upstream Injection on a Confined Supersonic Cavity Flow	Sumit Lonkar, Shiv Prateek S, Nimesh Thakor and Pratikash Panda
12:30 - 14:00	Lunch break	
14:00 - 14:20	Shock interaction in a Transverse injection from a Bumped Surface in a Supersonic Crossflow	Spandan Maikap and Arun Kumar R
14:20 - 14:40	Shock Boundary Layer Interaction in Internal Flow: Dependence on the Method of Throttling	Balaji A Himakar and Srisha M V Rao
14:40 - 15:00	Particle Image Velocimetry of a Highly Separated Transitional Shock-Wave/Boundary-Layer Interaction	Philipp L. Nel, Anne-Marie Schreyer, Ferry F. J. Schrijer and Bas W. van Oudheusden
15:00 - 15:20	An experimental study to investigate the effect of dynamic variation of the shock strength on shock boundary layer interaction	Rahul R. Kapse and T. M. Muruganandam
15:20 - 15:50	Coffee break	
15:50 - 16:10	Shock refractions at an air-water interface in weak and strong incident shock regimes	Anbu Serene Raj C, Rajesh G, A Sameen and Ben-Dor Gabriel
16:10 - 16:30	Experimental investigations on the interaction between impinging shock and cavity shear layer	Madavan Dwarakesh, Abhishek Kumar, Samiayyan Pandian and Rengarajan Sriram
16:30 - 16:50	Study on the Interaction of Cavity Flow with Oscillating Shock Train	Dandu Sri Sruthi, Madavan Dwarakesh, Sundararajan L. N. Desikan and Rengarajan Sriram
16:50 - 17:10	Shock wave boundary layer interaction control with shock control bumps	Jane Bulut, Ferry Schrijer and Bas van Oudheusden
17:30	Reception	

Tuesday 2 July 2024

09:00	Registration desk open	
Keynote 9:10 - 10:10	Experimental/numerical analysis of shock-wave/boundary-layer interactions and their control	Anne-Marie Schreyer
10:10 - 10:30	Numerical Investigation of Suction Effects on Interaction and Transition of Laminar/Transitional SWBLI in a Hypersonic Double Wedge	DiviaHarshaVardini R C, Rajesh G, and Ikhyun Kim
10:30 - 10:50	Spanwise properties of a hypersonic shock wave/boundary layer interaction on a heated surface	Divek Surujhla, Alexander Wagner, Tobias Ecker and Jan Martinez Schramm
10:50 - 11:10	Experiments on Control of Large Amplitude Shock Train Oscillations using Bleed	Anuj Nigam, Abhishek Kumar, Sundararajan. L. N. Desikan and Rengarajan Sriram
11:10 - 11:30	Coffee break	
11:30 - 11:50	Unsteady shock reflections over an oscillating ramp using the Meshless method	Shubham K Vyas, Divya Harshavardhini, Vinoth P., and Rajesh G.
11:50 - 12:10	Extinguishing detonation in pipelines transporting gaseous fuels	Zbigniew A. Walenta and Agnieszka M. Stowicka
12:10 - 12:30	Review of Ongoing Chemical Kinetics Studies at Laboratory for Hypersonic and Shock Wave Research, IISc	Chaitanya Bhoir, Deepak Singh, Arunan Elangannan and Jagadeesh Gopalan
12:30 - 14:00	Lunch break	
14:00 - 14:20	Shock Control Bumps for Mitigation of Transonic Buffet Loads on an Airfoil	A. D'Aguanno, A. Corduas, F. Schrijer, B. van Oudheusden
14:20 - 14:40	Mach Stem Height Estimation in Strong Reflection Domain for Overexpanded Jets	Vinoth Paramanandham, Reva Dhillon, I. V. Thara Reshma, and Rajesh Gopalapillai
14:40 - 15:00	Passive flow control in confined supersonic cavities of varying impinging shock strengths	Sreejita Bhaduri, Ashoke De and Mohammed I. Sugarno
15:00 - 15:20	On the convergence of cylindrical shock wave	Sourabh Bhardwaj, Nicholas Apazidis and Michael Liverts
15:20 - 15:50	Coffee break	
15:50 - 16:10	Reconstruction of flow field from sparse data using physics informed neural network	Sivaprasad Gangadharan and Rajesh Gopalapillai
16:10 - 16:30	Assessment of Local Artificial Diffusivity and Gradient-Based Reconstruction Methods for High-Speed Flows	Ritu Raj Kumar, Shivam Saini, Nagabhushana Rao Vadlamani, and Amareshwara Sainadh Chamarthi
16:30 - 16:50	Effects of ridge-type spanwise heterogeneous roughness on shock-wave/turbulent boundary layer interactions	Wencan Wu, Luis Laguarda, Davide Modesti, and Stefan Hickel
16:50 - 17:10	Analysis for analog system of detonation with two step chemical reaction model	Yuanxiang Sun

Wednesday 3 July 2024

09:00	Registration desk open	
Keynote	Flow-separation unsteadiness in over-expanded supersonic nozzles	Emanuele Martelli
9:10 - 10:10		
10:10 - 10:30	Intermittent shock oscillations and Kelvin Helmholtz vortices past a supersonic micro ramp	Sumit Sunil Tambe, F. Schrijer and B. van Oudheusden
10:30 - 10:50	Research on Ultrafast Response Pressure- Sensitive Paint Suitable for Measuring Unsteady Shock Wave Phenomena in Atmospheric Pressure Environments	Daiju Numata, Yuma Kawamata, Takeru Kawashima and Kiyonobu Ohtani
10:50 - 11:10	Experimental study on the effect of leading edge bluntness on an osculating waverider in hypersonic flow	P V Karthikeya Bharadwaj, Agnivo Ghosh, Gopalan Jagdeesh, S Sarvanan, K Nagashetty, Srisha MV Rao
11:10 - 11:30	Coffee break	
11:30 - 11:50	Prediction of Pseudosteady shock refraction over air-water interface using Fourier Neural Operator	Sivaprasad G, Kushi Borwal, Anbu Serene Raj C and Rajesh G
11:50 - 12:10	Closure	
12:15 - 13:00	Lunch break	
13:00 - 18:00	Excursion: Kinderdijk	
19:00	Conference dinner	

Thursday 4 July 2024

10:00 - 12:00	Lab tours	
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