

Day 3 - 17th July 2019, Wednesday

Time	Program				
08:00 - 08:45	<i>Foyer</i>				
	Registration				
09:00 - 09:45	<i>L77A</i>				
	Session Chair: Prof. Richard Morgan				
	Ray Stalker Lecture: Investigations in the piston driven shock-tunnel HELM Prof. Christian Mundt Universität der Bundeswehr München				
09:45 - 09:50	Movement				
	Shock Wave Reflection / Interaction (1)	Numerical Methods (1)	Richtmyer-Meshkov Instability (3)	Blast Waves (1)	
	<i>L77A</i>	<i>Auditorium</i>	<i>EA-06-02</i>	<i>EA-06-03</i>	
	<i>Session Chair: Randall Paton</i>	<i>Session Chair: Kim Heuy Dong</i>	<i>Session Chair: Vincent Wheatley</i>	<i>Session Chair: Manjit Singh</i>	
09:55 - 10:15	A Numerical Investigation on the Radial Stability of Non-Synchronous Focusing Shock Waves Federico Alzamora Previtali (OR-15-0413) A.J. Higgins, E. Timofeev	Discrete Boltzmann modeling of hydrodynamic instability Xu Aiguo (OR-11-0042) Zhang Yudong, Feng Chen, Gan Yanbiao, Lai HuiLin, Lin Chuandong	Measurements of the Richtmyer-Meshkov Instability in Shock Tubes using Time-Resolved PIV Jeffrey Jacobs (OR-13-0472) K. Ferguson, E. Sewell	Comparisons of the Blast Waves from Spherical and Cylindrical Charges Charles Needham (OR-01-0020) Jakob D. Brisby & David J. Ortle	
10:15 - 10:35	Onset of the Mach Reflection of ZND Detonations Li Jian (OR-15-0048) J. Ning	Validation of OpenFOAM and hy2Foam in hypersonic flow simulations Tay Wee Beng (OR-11-0077) J.M. Li, C.J. Teo, B.C. Khoo, X.Y. Zhang	Blast-driven Richtmyer-Meshkov instability growth in a cylindrical geometry Devesh Ranjan (OR-13-0299) B. C. Musci, S.J. Petter, G. Pathikonda	Effect of crater's shape and profile on blast wave transfer of shallow buried charge detonation Aniza Ibrahim (OR-01-0407) Zulkifli Abu Hassan, Norazman Mohamad Nor	
10:35 - 10:55	Dynamics of motion of a pair of particles in a supersonic flow Dmitry Sidorenko (OR-15-0049) P. Utkin, V. Boiko	Harmonic Balance Method for Two-dimensional Transonic Flows Chai Zhenxia (OR-11-0103) Liu Wei, Zeng Ming, Sun Xi-Wan, Yang Qi	High-Speed PLIF of a Twice-Shocked Gas Interface Riccardo Bonazza (OR-13-0454) Christopher Noble, Joshua Herzog, Alex Ames, Jason Oakley, David Rothamer	Experimental investigation on the behavior of multiple shock interactions inside launch pad Jagadeesh Gopalan (OR-01-0374) P. Suriyanarayanan, L. Venkatakrisnan	
10:55 - 11:15	Tea Break				
	Facilities (3)	Numerical Methods (2)	Shock Wave Interaction with Various Media (3)	Blast Waves (2)	
	<i>L77A</i>	<i>Auditorium</i>	<i>EA-06-02</i>	<i>EA-06-03</i>	
	<i>Session Chair: Christopher James</i>	<i>Session Chair: Michael Liverts</i>	<i>Session Chair: Yoshitaka Sakamura</i>	<i>Session Chair: Charles Needham</i>	
11:15 - 11:35	Generating High Speed Earth Re-entry Test Conditions in an Expansion Tube for Interplanetary Return Missions Christopher James (OR-06-0424) Steven W. Lewis, David E. Gildfind, Richard G. Morgan, Timothy J. McIntyre, Yu Liu	A modified rotated HLLC scheme with improved convergence for steady-state simulations B. Zang (OR-11-0121) U S Vevek, T. H. New	Towards spontaneous ignition of reactive particles in a high-pressure shock tube Marianne Gjestvold Omang (OR-14-0371) K. O. Hauge	Gun Muzzle Blast Characteristics Dependent on Propellant Leakage Past the Projectile Robert Hruschka (OR-01-0010) D. Klatt, A. Zeiner	
11:35 - 11:55	Nozzle Reservoir Thermometry by Laser-Induced Grating Spectroscopy in the HELM Free-Piston Reflected Shock Tunnel Claudio Selcan (OR-06-0497) T. Sander, Ch. Mundt	Performance evaluation of symbolic regression methods on hypersonic aerodynamic data modeling Luo Changtong (OR-11-0138) Z. Chen, Z. Jiang	Experimental Investigation on Effect of Viscosity in Drop Breakup Following Shock Passage Huang Xi Long (OR-14-0163) J.H. Liu, S. Shen	The Influence of Particle Reaction on Blast Waves and Flyer Plate Acceleration from Metalized Explosives David Frost (OR-01-0323) Quentin Pontaller, Sam Goroshin, Jason Loiseau, Aaron Longbottom, Scott Cargill, Christopher Grapes, Alec Milne, Fan Zhang	
11:55 - 12:15	Hypersonic Flow Conditions for Aerodynamic Tests of a Martial Entry Model in the Shock Tunnel JF12 Hu Zongmin (OR-06-0167) J. Peng, Z.J. Han, C.K. Yuan, Y.P. Wang	A Parameter-free Iu-adaptive Algorithm for Improving High-Order Weighted Compact Nonlinear Schemes Wang Dongfang (OR-11-0233) Zheng Shichao, Deng Xiaogang, Zeng Ming	Experimental Study and Theoretical Simulation of Thermal Behavior of TPS Material in Re-Entry Space Capsule Kavitha Jayaram (OR-14-0484) Prakash Gopalakrishnan, V. Jayaram	5-cm-by-5-cm Detonation-Driven Blast Simulator for Fluid Dynamic Research on Blast Injury Toshiharu Mizukaki (OR-01-0321) A. Kato, M. Mori, Y. Sekine and T. Saito	
12:15 - 12:35	Numerical analysis of double-nozzle starting process in Ludwieg tube with wide-range Mach number Wang Lu (OR-10-0151) Gao Liangjie, Zhanshen Qiana	Numerical Survey on Shock Anomalies from Moving Shocks Keiichi Kitamura (OR-11-0253) E. Shima	Experimental study on washing effect for textile using the underwater explosion Kazutaka Kitagawa (OR-14-0041) K. Ohtani	Blast Mitigation Studies In Layered Materials In Blast Wave Generator Inderpal Singh Sandhu (OR-01-0069) Ankush Sharma, b, Meenakshi Bhatt Kala, c, Prashant S Alegaonkar, d, Manpreet Singh, e, Rama Arora, f, D R Saroha	
12:35 - 13:45	Lunch				
14:00-18:00	Excursion				