

IICR2016 Poster presentations

1. **Daria Ogloblina, Nikolaus Adams, Steffen Schmidt (Technische Universität München)**
Title: *Sharp-interface modelling and simulation of the collapse of bubble clouds near surfaces*
2. **Prasanta Sankar, Jean-Pierre Franc, Marc Fivel, Giovanni Ghigliotti (Institut Polytechnique de Grenoble)**
Title: *Simulation of cavitation erosion by a coupled CFD-FEM approach*
3. **Shrey Joshi, Jean-Pierre Franc, Marc Fivel, Giovanni Ghigliotti (Institut Polytechnique de Grenoble)**
Title: *Cavitation modelling using Smoothed Particle Hydrodynamics*
4. **Nikolaos Kyriazis, Phoevos Koukouvinis, Manolis Gavaises (City University London)**
Title: *Simulation of cavitation using compressible flow solvers*
5. **Saad Jahangir, Christian Poelma, (Delft University of Technology)**
Title: *Quantitative measurements: Characterization of cavitation during the closing of mechanical heart valves*
6. **Polina Gorkh, Nikolaus Adams, Steffen Schmidt (Technische Universität München)**
Title: *Simulation of turbulent cavitating flows by physically consistent implicit LES*
7. **Ebrahim Ghahramani, R.E.Bensow (Chalmers University of Technology)**
Title: *Modelling for incompressible LES using a DNS-based sub-grid model for bubble cloud dynamics*
8. **Mohammad Hossein Arabnejad Khanouki, R.E.Bensow (Chalmers University of Technology)**
Title: *Simulation of the hydrodynamic energy cascade in erosive cavitation*
9. **Evangelos Stavropoulos-Vasilakis, Phoevos Koukouvinis, Ilias Malgarinos, Manolis Gavaises (City University London)**
Title: *Coupled simulation of valve motion and cavitation/Application to mechanical heart valve*
10. **Sören Schenke, Tom Van Terwisga (Delft University of Technology)**
Title: *Predicting Dynamics of cavitating vortices and their relation to surface erosion*
11. **Themistoklis Melissaris, N. Bulten, Petra Stoltenkamp (Wärtsilä Netherlands B.V.)**
Title: *Simulation of cavitation and surface erosion on marine propellers*
12. **Max Brunhart, Celia Soteriou (Delphi Diesel Systems), Manolis Gavaises (City University London)**
Title: *Cavitation in high pressure fuel systems and the application of methods for erosion prediction: initial investigations of cavitation in injectors*
13. **Marco Cristofaro, Wilfried Edelbauer (AVL), Manolis Gavaises (City University London)**
Title: *Validating the compressible multiphase solver FIRE and a comparison of off-the-shelf Rayleigh-Plesset based cavitation models*
14. **Mithun Murali Girija, Phoevos Koukouvinis, Manolis Gavaises (City University London)**
Title: *Numerical modelling of dissolved gas in compressible two-phase mixture*
15. **Magdalini Katoufa, Nikolaos Mitroglou, Manolis Gavaises (City University London)**
Title: *Instantaneous measurements of cavitation volume fraction, velocity field, wall pressure induced by bubble collapse and link to material loss*
16. **T. Traudt, M. Wittal, C. Manfretti (Institute of Space Propulsion - German Aerospace Center, DLR)**
Title: *Applicability of Lattice Boltzmann Model in rocket Engines*

17. **B.Bedan, F. Orley, T. Trummler, M.S. Mihatsch, C.P. Egerer, S.J. Schmidt, S. Hickel, N.A. Adams (Technische Universität München)**
Title: *Cavitation phenomena in Diesel injection systems*
18. **C. Bombardieri, T. Traudt, C. Manfletti (Institute of Space Propulsion - German Aerospace Center, DLR)**
Title: *Cavitation phenomena in liquid rocket engine feedlines*
19. **D. Eskin, I. Tzanakis & F. Wang (Brunel University London)**
Title: *Ultrasonic melt processing*
20. **B. Budich, F. Borrmann, S. J. Schmidt, N. A. Adams (Technische Universität München)**
Title: *Compressible simulation of cavitating ship propeller flow*
21. **John Koulakis, Seth Putterman, Josh Rouch, NhanHuynh, James Dunn (UCLA)**
Title: *Therapeutic ultrasound does not cause cavitation in gassy saline injected into interstitial tissue*
22. **Xiuxiu Lyu, Xiangyu Hu, Nikolaus A. Adams (Technische Universität München)**
Title: *Numerical simulation of the homogeneous nucleation using one Euler-Lagrange scheme*
23. **Tadej Stepišnik Perdih, Matevž Dular, Brane Širok (University of Ljubljana)**
Title: *Can cavitation revolutionize laundering?*
24. **Homa Naseri, Nicholas Mitroglou, Manolis Gavaises (City University London), Robert Barbour, Avtar Panesar, Kieran Trickett (Lubrizol Corporation)**
Title: *Power Gain: Effect of fuel additives on hydrodynamic flow in modern Diesel fuel injection systems*
25. **Ilias Malgarinos, Phoivos Koukouvinis, Manolis Gavaises (City University London)**
Title: *Immersed Boundary Method for the simulation of eccentric needle motion in cavitating Diesel injectors*
26. **P. Koukouvinis, I.K. Karathanassis, M. Gavaises (City University London), J. Li, L. Wang (Caterpillar Inc)**
Title: *Simulation of a high-pressure fuel pump, including cavitation effect*
27. **P. Koukouvinis, M. Gavaises (City University London), J. Li, L. Wang (Caterpillar Inc)**
Title: *Simulation of cavitating flow in Diesel injectors, including erosion detection*
28. **P. Koukouvinis, M. Gavaises (City University London), O. Supponen, M. Farhat (EPFL)**
Title: *Simulations of bubble dynamics in asymmetric configurations*
29. **G. Strotos, I. Malgarinos, N. Nikolopoulos, M. Gavaises (City University London)**
Title: *Aerodynamic droplet breakup in a high temperature gas environment*
30. **Patrik Zima (Institute of Thermomechanics CAS), Miloš Müller, Jan Hujer, Václav Jíříček (Technical University of Liberec), Milan Sedlář, Martin Komárek (Centre of Hydraulic Research)**
Title: *Simulation of cavitation using compressible flow solvers*
31. **N. Mitroglou, M. Gavaises (City University London), M. Lorenzi, M. Santini (University of Bergamo)**
Title: *Micro-CT quantitative cavitation measurements in high-speed Diesel flows*
32. **Chen Weizhong (Nanjing University, China)**
Title: *Abnormal attenuation of powerful ultrasound propagating in cavitating liquid*
33. **H. Jadidbonab, N. Mitroglou and M. Gavaises (City University London)**
Title: *Experimental study on diesel fuel droplet impingement on spherical heated surface*
34. **Zhenyang Zhang, Wenjun Zhong, Zhixia He, Xichen Tao, Qian Wang (Jiangsu University)**
Title: *Visual experiment of string cavitation in both real-size and enlarged diesel injector nozzles and its effect on spray*

