

08/18/2009 Tuesday

Technical Session 4 9.30 - 10.45 PM	Cavitation in Naval Context	Numerical Computation of Cavitating Flows	Acoustic Cavitation
	<i>Session Chair: W.Straka</i> <i>Session Chair: K. Rozhdestvensky</i>	<i>Session Chair: S. Kinnas</i> <i>Session Co Chair: Y. Matsumoto</i>	<i>Session Chair: D. Dowling</i> <i>Session Co Chair: T.Colonius</i>
9.30-9.55AM	<b>100</b> Shallow angle water entry of ballistic projectiles. <i>Tadd Truscott, A.Techet, D. Beal</i>	<b>8</b> Numerical analysis of hydrofoil ventilated cavitation under wave impact, <i>E. Amromin</i>	<b>7</b> Weakly nonlinear analysis of dispersive waves in mixtures of liquid and gas bubbles based on a two-fluid model, <i>T. Kanagawa, T. Yano, M. Watanabe, S. Fujikawa</i>
9.55-10.20 AM	<b>125</b> The influence of aerodynamic pressure on the water-entry cavities formed by high-speed projectiles, <i>J. Aristoff</i>	<b>97</b> A boundary element method for the strongly nonlinear analysis of surface-piercing hydrofoils, <i>V. Vinayan, S. Kinnas</i>	<b>129</b> Imaging the effect of acoustically induced cavitation bubbles on the generation of shear-waves by ultrasonic radiation force, <i>J. Gateau, M. Pernot, M. Tanter, M. Fink</i>
10.20-10.45 AM	<b>146</b> Control experiments with a semi-axisymmetric supercavity and a supercavity-piercing Fin, <i>M. Wosnik, R. Arndt</i>	<b>94</b> Prediction of cavitating flow around 3-D straight/swept hydrofoils, <i>S. Singh, S. Kinnas</i>	<b>134</b> Acoustically induced and controlled micro-cavitation bubbles as active source for transcranial adaptive focusing, <i>J. Gateau, L. Marsac, J. Aubry, M. Pernot, M. Tanter, M. Fink</i>
Technical Session 5 11.10 - 12.25 PM	Cavitation in Turbo-machinery	Bubble Dynamics	Environmental Cavitation/ Sono-Luminescence
	<i>Session Chair: W.Shyy</i> <i>Session Co Chair: G.Kuiper</i>	<i>Session Chair: Jean-Pierre Franc</i> <i>Session Co Chair: B.Stoffel</i>	<i>Session Chair: K.Mørch</i> <i>Session Co Chair: J.Katz</i>
11.10-11.35 AM	<b>161</b> Prediction research on cavitation performance for centrifugal pumps, <i>W. Yong, L. Houlin, Y. Shouqi, T. Minggao, W. Kai</i>	<b>74</b> A hybrid lagrangian-eulerian approach for simulation of bubble dynamics, <i>S. Apte, E. Shams, J. Finn</i>	<b>37</b> Development of ballast water treatment technology by mechanochemical cavitations, <i>T. Yoshimura, S. Kubota, T. Seo, K. Sato</i>
11.35-12.00 PM	<b>15</b> Prediction of impeller speed dependence of cavitation intensity in centrifugal pump using cavitating flow simulation with bubble flow model, <i>M. Fukaya, Y. Tamura, Y. Matsumoto</i>	<b>46</b> Modeling and analysis of a cavitating vortex in 2D unsteady viscous flow, <i>J. Bosschers</i>	<b>103</b> Cavitation as a microfluidic tool, <i>C. Ohl, P. Quinto-Su, R. Dijkink, R. Gonzalez, F. Prabowo, X. Huang, T. Wu, V. Venugopalan</i>
12.00-12.25 PM	<b>60</b> Rate-dependent hydroelastic response of self-adaptive composite propellers in fully wetted and cavitating flows, <i>Y. Young, M. Motley</i>	<b>132</b> Dynamics of a vapour bubble near a thin elastic platel, <i>M. Shervani-Tabar, M. Shabgard, M. Rezaee, R. Zabihyan</i>	<b>166</b> Precursor luminescence near the collapse of laser-induced bubbles in alkali-salt solutions, <i>H. Chu, S. Vo, T. Hsieh</i>
Technical Session 6 2.25 - 3.40 PM	Numerical Computation of Cavitating Flows	Bio-medical Applications	Cavitation Erosion
	<i>Session Chair: L.d'Agostino</i> <i>Session Co Chair: M.Farhat</i>	<i>Session Chair: I. Kirschner</i> <i>Session Co Chair: S. Takagi</i>	<i>Session Chair: H.Kato</i> <i>Session Co Chair:T. Van Terwisga</i>
2.25-2.50 PM	<b>52</b> Numerical simulation of three-dimensional unsteady sheet cavitation, <i>A. Koop, H. Hoeijmakers</i>	<b>177</b> Damage potential of the shock-induced collapse of a gas bubble, <i>E. Johnsen, T. Colonius, R. Cleveland</i>	<b>33</b> Prediction of cavitation erosion based on the measurement of bubble collapse impact loads, <i>S. Hattori, T. Hirose, K. Sugiyama</i>
2.50-3.15 PM	<b>18</b> Unsteady bubbly cavitating nozzle flows, <i>C. Delale, Z. Başkaya, S. Schmidt, G. Schnerr</i>	<b>98</b> Removal of an obstruction from a tube by a collapsing bubble, <i>S. Ohl, D. Pavard, E. Klaseboer, B. Khoo</i>	<b>41</b> Cavitation Erosion - A critical review of physical mechanisms and erosion risk models, <i>T. Van Terwisga, P. Fitzsimmons, E. Foeth, Z. Li</i>
3.15-3.40 PM	<b>56</b> A Numerical study of unsteady cavitation on a hydrofoil, <i>S. Kim</i>	<b>104</b> Bubble shock wave interaction near biomaterials, <i>S. Ohl, E. Klaserboer, B. Khoo</i>	<b>32</b> Comparison of cavitation erosion rate with liquid impingement erosion rate, <i>S. Hattori, M. Takinami, T. Otani</i>

Technical Session 7 4.05 - 5.20 PM	Cavitation in Naval Context	Super-Cavitation	Hydrodynamic Cavitation
	<i>Session Chair: K. Rozhdestvensky</i> <i>Session Co Chair: KH Kim</i>	<i>Session Chair: I. Kirschner</i> <i>Session Co Chair: G. Kuiper</i>	<i>Session Chair: V. Serebryakov</i> <i>Session Co Chair: H. Takahira</i>
4.05-4.30 PM	<b>156</b> Development of measurement techniques for studying propeller erosion damage in severe wake fields, <i>W. Pfitsch, S. Gowing, D. Fry, M. Donnelly, S. Jessup</i>	<b>145</b> A simple approach to estimating three-dimensional supercavitating flow fields, <i>I. Kirschner, R. Chamberlin, J. Grant</i>	<b>169</b> Physical - mathematical bases of the principle of independence of cavity expansion, <i>Serebryakov V.</i>
4.30-4.55 PM	<b>30</b> Numerical Study on Cavitation Erosion Risk of Marine Propellers Operating in Wake Flow, <i>N. Hasuike, S. Yamasaki, J. Ando</i>	<b>136</b> Air entrainment mechanisms from artificial supercavities: Insight based on numerical simulations, <i>M. Kinzel, J. Lindau, R. Kunz</i>	<b>164</b> Observations and numerical simulations of unsteady partial cavitation on 2-d hydrofoil, <i>X. Peng</i>
4.55-5.20 PM	<b>16</b> Slip effects in vortical structure behind cavitating propeller wake. <i>B. Paik</i>	<b>130</b> Controlled supercavitation formed by a ring type wing, <i>V. Makhrov</i>	<b>48</b> Cavity flow with surface tension past a flat plate, <i>Y. Savchenko, Y. Semenov</i>