08/19/2009 Wednesday

Techical Session 8 8.30 - 9.45 AM	Cavitation in Turbomachinery	Numerical Computation of Cavitating Flows	Cavitation Erosion
	Session Chair: KH Kim *Session Co Chair: V. Serebryakov*	*Session Chair: I.Kirschner* *Session Co Chair: L.d'Agostina*	*Session Chair: JP Franc* *Session Co Chair: T. Ikohagi*
8.30-8.55AM	**149** Mechanism and scalability of tip vortex cavitation suppression by water and polymer injection. *N.Chang, R.Yakushiji, H.Ganesh, S.Ceccio*	**137** An Examination of Thermal Modeling Affects to the Numerical Prediction of Large-Scale Cavitating Fluid Flow, *M. Kinzel, J. Lindau, R. Kunz*	**67** Numerical prediction of cavitation erosion in cavitating Flow, *N. Ochiai, Y. Iga, M. Nohmi, T. Ikohagi*
8.55-9.20 AM	**122** Simulation of cavitation instabilities in inducers, *A. Hosangadi, V. Ahuja, R. Ungewitter*	**141** Numerical Prediction of Cavitation and Pressure Fluctuation around Marine Propeller, *K. Sato, A. Ohshima, H. Egashira, S. Takano*	**180** On some physics to consider in numerical simulation of erosive cavitation, *G. Bark, M. Grekula, R. Bensow, N. Berchiche*
9.20-9.45 AM	**40** Analytical investigations of thermodynamic effect on cavitation characteristics of sheet and tip leakage vortex cavitation, *S. Watanabe, A. Furukawa, Y. Yoshida, Y. Tsujimoto*	**116** Numerical modeling of cavity flow on bottom of a stepped planing hull, *M. Makasyeyev*	**131** Modeling collapse aggresiveness of cavitation bubbles in hydromachinery, *P. Zima, M. Sedlář, M. Müller*
Techical Session 9 10.05 - 11.20 AM	Numerical Computation of Cavitating Flows	Advanced Experimental Techniques	Bubble Dynamics
	Session Chair: T.Colonius *Session Co Chair: G.Bark*	*Session Chair: T. Van Terwisga* *Session Co Chair: J.Katz*	*Session Chair: W.Straka* *Session Co Chair: H.Takahira*
10.05-10.30 AM	**42** Investigation on numerical schemes in the simulation of barotropic cavitating flows, *B. Marco, B. François, S. Maria-Vittorial*	**35** Application of computer vision techniques to measure cavitation bubble volume and cavitating tip vortex diameter., *L. Savio, M. Viviani, F. Conti, M. Ferrando*	**157** Model for the oscillations of the shell of a contrast agent, liquid and solid cases, *J. Naude, F. Mendez*
10.30-10.55 PM	**138** A dual-time implicit preconditioned Navier-Stokes method for solving 2D steady/unsteady laminar cavitating/noncavitating flows using a Barotropic model, *K. Hejranfar, E. Ezzatneshan, K. Hesary*	**58** Determination of the tensile strength and the nuclei spectrum by means of the In-Situ-Nozzle, *N. Hamadeh, P. Pelz, B. Stoffel, G. Ludwig*	**183** Incepting cavitation acoustic emissions due to vortex stretching *N.Chang, S.Ceccio*
10.55-11.20 PM	**87** Assessment of a central difference finite volume scheme for modeling of cavitating flows using preconditioned multiphase Euler equations, *K. Hejranfar, K. Hesary*	**179** Cavitation phenomena in a stagnation point flowl, *Y. Lu, B. Gopalan, E. Celik, J. Katz, D. Van Wie*	**167** Gas bubble growth dynamics in a supersaturated solution: Henry's and Sievert's solubility laws, *A. Kuchma, G. Gor, F. Kuni*
Techical Session 10 11.40 - 12.30 PM	Cavitation in Cryogenics	Numerical Computation of Cavitating Flows	Super-cavitation
	Session Chair: D.Dowling *Session Co Chair: Y. Matsumoto*	*Session Chair: T.Ikohagi* *Session Co Chair: W.Shyy*	*Session Chair: KH Kim* *Session Co Chair: M.Farhat*
11.40-12.05 PM	**102** A Multi-scale study on the bubble dynamics of cryogenic cavitation, *S. Tsuda, S. Takeuchi, Y. Matsumoto, M. Koshi, N. Yamanishi*	**175** Design of cavitation-free hydrofoils by a given pressure envelope, *D. Maklakov, F. Avkhadiev*	**111** Investigation of the behavior of ventilated supercavities, E. Kawakami, M. Williams, R. Arndt
12.05-12.30 PM	**65** Thermo-fluid dynamic experiment of He II cavitating flow, *M. Murakami, K. Harada*	**68** Study on unsteady cavitating flow simulation around marine propeller using a RANS CFD code, *K. Kimura,T. Kawamura, Z. Huang, A. Fujii, T. Taketani*	**21** Supercavitating motion of a wedge in a jet, *Y. Antipov, A. Zemlyanova*
12.30-12.55 PM			**86** Drag reduction for high-speed underwater vehicles, *I. Nesteruk*