



Technical Sessions (Tuesday Morning, September 18)

Tuesday Morning (September 18) 10:10 - 12:10

Pumps 3 (RY204)

Chairs: Dr. Takahide Nagahara (Hitachi, Ltd., Japan), Prof. Mehrdad Raisee Dehkordi (University of Tehran, Iran)

[IAHR2018-019](#) “Unsteady Flow Characteristic Analysis of a Centrifugal Pump under Over-load Operating Conditions”, Xiaoran Zhao (Tsinghua University, China), Yexiang Xiao (Tsinghua University, China), Zhengwei Wang (Tsinghua University, China), Jin Zhang (Tsinghua University, China)

[IAHR2018-150](#) “A Theoretical, Numerical and Experimental Analysis of S-Shape Instabilities in Reversible Pump-Turbines: Resultant Strategies for Improving Operational Stability”, Markus Lenarcic (ANDRITZ AG, Austria), Arno Gehrler (ANDRITZ AG, Austria)

[IAHR2018-362](#) “Suppression of the unstable head curve in mixed flow pump with adjustable vane by use of shallow grooves”, Shusaku Kagawa (EBARA CORPORATION, Japan), Takaki Sakurai (EBARA CORPORATION, Japan)

[IAHR2018-315](#) “Analysis of blade-passage flow of a mixed-flow pump at performance-curve instability”, Isao Hagiya (Hitachi, Ltd., Research and Development Group, Japan), Chisachi Kato (Institute of Industrial Science, The University of Tokyo, Japan), Yoshinobu Yamade (Mizuho Information & Research Institute, Inc., Japan), Masashi Fukaya (Hitachi, Ltd., Research and Development Group, Japan), Takahide Nagahara (Hitachi, Ltd., Industrial Products Company, Japan)

[IAHR2018-391](#) “Influence of forward rake and skew blade angle on positive slope characteristics of mixed flow pumps”, Naruki Nitta (WASEDA University, Japan), Hitoshi Kanno (WASEDA University, Japan), Satoshi Maeda (WASEDA University, Japan), Kazuyoshi Miyagawa (WASEDA University, Japan), Yasushi Shinozuka (DMW Corporation, Japan), Kotaro Kado (DMW Corporation, Japan), Shigeyuki Tomimatsu (DMW Corporation, Japan)

[IAHR2018-022](#) “Development and Validation of a One-Dimensional Transient Rotodynamic Pump Model at Component Scale.”, Laura Matteo (CEA, Universite Paris-Saclay, France), Antoine Dazin (LMFL, France), Nicolas Tauveron (CEA Grenoble, France)