



## Technical Sessions (Thursday Morning, September 20)

### Thursday Morning (September 20) 10:10 - 12:10

#### Pumped Storage 1 (RY306)

Chairs: Dr. Zhigang Zuo (Tsinghua University, China), Dr. Yasuyuki Enomoto (Toshiba Corporation, Japan)

[IAHR2018-211](#) **“Transient approach for identification of the S-shape region of pump turbines”**, Wilhelm Weber (Voith Hydro Holding GmbH & Co. KG, Heidenheim, Germany), Jens Kahler (Voith Hydro Holding GmbH & Co. KG, Heidenheim, Germany), Marcelo Magnoli (Voith Hydro Holding GmbH & Co. KG, Heidenheim, Germany), Armin Schuh (Voith Hydro Holding GmbH & Co. KG, Heidenheim, Germany), Jiri Koutnik (Voith Hydro Holding GmbH & Co. KG, Heidenheim, Germany)

[IAHR2018-247](#) **“Hump Characteristic of Pump-Turbine with Splitter Blades under Different Guide Vane Openings”**, Jing Jia (Jiangsu University, China)

[IAHR2018-067](#) **“Influence of Cavitation on Hump Characteristics in a Pump-Turbine Model”**, Deyou Li (Harbin Institute of Technology, China), Song Lin (Harbin Institute of Technology, China), Hongjie Wang (Harbin Institute of Technology, China), Wenwen Fu (Harbin Institute of Technology, China), Jinxia Chen (Harbin Institute of Large Electrical Machinery, China), Xianzhu Wei (Harbin Institute of Large Electrical Machinery, China), Daqing Qin (Harbin Institute of Large Electrical Machinery, China)

[IAHR2018-101](#) **“Studies on the evolutions of the axial force and moment of the runner and guide vanes during runaway transient process in pump mode”**, Zhiyan Yang (Wuhan University, China), Yongguang Cheng (Wuhan University, China), Linsheng Xia (Wuhan University, China)

[IAHR2018-418](#) **“Experiments and numerical simulations of a flow instability in a low-specific-speed Pump-Turbine”**, Koichiro Matsumura (Aoyama Gakuin University, Japan), Kazuhiko Yokota (Aoyama Gakuin University, Japan), Donghyuk Kang (Saitama University Graduate school, Japan), Wakana Tsuru (Aoyama Gakuin University, Japan), Hayate Sugiyama (Aoyama Gakuin University, Japan)

[IAHR2018-412](#) **“Non-axisymmetric flow characteristic in a pump turbine runner at pump mode”**, Like Wang (Xi'an University of Technology, China), Weili Liao (Xi'an University of Technology, China), Jinling Lu (Xi'an University of Technology, China)