



## Technical Sessions (Thursday Afternoon, September 20)

### Thursday Afternoon (September 20) 13:30 - 15:10

#### Pumped Storage 2 (RY306)

Chairs: Prof. Zhengwei Wang (Tsinghua University, China), Mr. Satoshi Narusawa (Hitachi Mitsubishi Hydro Corporation, Japan)

[IAHR2018-431](#) **“Design of a pump-turbine using a quasi-potential flow approach, mathematical optimization and CFD”**, Frantisek Pochyly (Brno University of Technology, Czech), Pavel Rudolf (Brno University of Technology, Czech), David Stefan (Brno University of Technology, Czech), Prokop Moravec (Brno University of Technology, Czech), Jiri Stejskal (Brno University of Technology, Czech), Ales Skotak (CKD Blansko Engineering, Czech)

[IAHR2018-203](#) **“Multiobjective optimization design of ultrahigh-head pump turbine runners with splitter blades”**, Zan Ao Hu (Xihua university, China), Baoshan Zhu (Tsinghua University, China), Xiaobin Liu (Xihua university, China), Zhe Ma (Tsinghua University, China), Cheng Xue (Xi hua university, China)

[IAHR2018-097](#) **“A study on the evolution of the instability in two model pump-turbine runners with large blade leans”**, Zhe Ma (Tsinghua University, China), Baoshan Zhu (Tsinghua University, China), Lei Tan (Tsinghua University, China)

[IAHR2018-456](#) **“Experimental and numerical investigation of flows inside draft tube of a pump-turbine”**, Xide Lai (Xihua University, China), Quanwei Liang (Dongfang Electric Machinery CO., LTD, China), Daoxing Ye (Xihua University, China), Xiaoming Chen (Xihua University, China), Qiuqin Gou (Xihua University, China), Qinghua Zhang (Xihua University, China)