

# HPYD 7 - Session Guide

## Session 1: Experimental Hydrodynamics

- Characterization of a flow separation sensor on a hydrofoil: the Hydro e-Telltale - Patrick Bot et al.
- Review of underwater fluid-structure interaction measuring techniques - Laura Marimon Giovannetti and Ivan Stenius.
- Experimental investigations on conventional and unconventional boost systems to assist take-off of hydrofoil crafts - Luigi Minerva and Francisco Montero.

## Session 2: Disturbances and Controls

- Split-Flaps for Increased Heel Stability of T-Foil Configurations - Nimal Prabahar et al.
- Analytical study of a foiling catamaran in waves - Castaneda Sabadell et al.
- F50 Wing 2.0: Developing a next-generation wing sail control system - Edward Hawthorne and Jonathan Nicols.

## Session 3: Wind Powered Ships

- Route evaluation methods for long-distance sailing vessel performance predictions - Sofia Werner et al.
- Variation of underwater appendages and their effects on wind powered ships - Laura Marimon Giovannetti et al.
- Efficient jib-mainsail FSI modelling based on an extended Lifting-Line Theory – Validations with semi-rigid sails experiments - Antoine Morvan et al.

## Session 4: Sails

- On the effect of the leading-edge separation bubble on the aerodynamics of spinnakers - Jean-Baptiste Soupez et al.
- Force generation mechanisms of downwind sails - Abel Arredondo-Galeana and Ignazio Viola.
- Selection of Existing Sail Designs for Multi-Fidelity Surrogate Models - Tanya Peart et al.

## Session 5: Structures/Loads

- Aerodynamic performance - transferring load between cable and sail - J B Braun
- Designing and building for impact: Quantitative dynamic shear strength of sandwich core material - Thomas Basset et al.
- Localised core shear stress in sandwiches with facesheet thickness variations - Tom Allen and Elizabeth Grant.