

Spring School PHS 2022



Spring School on Theory and Applications of Port-Hamiltonian Systems Frauenchiemsee, 20 – 25 March 2022

The port-Hamiltonian approach allows for the structured modelling of complex, interconnected and heterogeneous multi-physical systems. It is the basis for control methods, which exploit the underlying physical structure or impose desired energetic behaviour in closed loop. The second edition of the international spring school PHS 2022 targets PhD students, PostDocs, and advanced Master students from engineering and applied mathematics, who are interested in the state of the art, current research topics and applications in the fields

- control of distributed parameter systems,
- structure-preserving numerical methods for multi-physics systems,
- port-Hamiltonian formulations of irreversible thermodynamic processes.

Focus topics with lectures, student presentations and round table discussions will be irreversible thermodynamics and GENERIC (Tuesday) and differential algebraic systems (Thursday).



Venue

The beautiful Benedictine abbey of Frauenwörth is located on the small island Fraueninsel in the Lake Chiemsee, around 90 km southeast of Munich, at the edge of the Bavarian Alps, half way to Salzburg.

Speakers

Alessandro Macchelli (Bologna), Arjan van der Schaft (Groningen), Bernhard Maschke (Lyon), Birgit Jacob (Wuppertal), Denis Matignon (Toulouse), Hans Christian Öttinger (Zürich), Hans Zwart (Twente), Jacquélien Scherpen (Groningen), Laurent Lefèvre (Valence), Paul Kotyczka (Munich), Thomas Hélie (Paris), Volker Mehrmann (Berlin), Yann Le Gorrec (Besançon).

Organizers

Paul Kotyczka (Technical University of Munich, Germany), Bernhard Maschke (University Claude Bernard Lyon 1, France) and the Franco-Bavarian University Cooperation Center in Munich (BayFrance).

Supported by



Costs

The attendance fee, incl. full board accommodation will be max. 500 € (depending on the room category).

Application and Contact

The school is limited to 48 participants. For updated information and the application form visit our website

www.mw.tum.de/rt/phs2022.

Send the signed form and your CV in pdf format to

phs2022.rt@ed.tum.de.

The application deadline is

15 December 2021.