

# Institute of Automation and Control Graz University of Technology



## 22<sup>nd</sup> Styrian Workshop on Automatic Control

September 5-7, 2022, Schloss Retzhof, Austria

#### **CONFERENCE PROGRAM**

#### Monday Sep 5, 2022

13:00	Lunch and Registration
14:30 - 14:40	Opening
14:40 – 15:20	Jakob Rehrl, Selma Celikovic, Johannes Khinast and Martin Horn Model based control applied to a continuous pharmaceutical "from powder to tablet" wet granulation line
15:20 – 16:00	Kevin Schwarzinger Control and Modelling of Plastic Extrusion Machines
16:00 – 16:40	Michael Ruderman Application of motion control with optimal nonlinear damping and convergent dynamics
18:00	Dinner

### Tuesday Sep 6, 2022

08:40 - 09:20	Valentin Kaisermayer, Daniel Muschick, Markus Gölles, Wolfgang Rosegger, Jakob Binder and Joachim Kelz Application of Optimization-based Energy Management Systems for Interconnected District Heating Networks
09:20 - 10:00	Robert Schürhuber, Carina Lehmal and Ziqian Zhang Test-oriented Stability mechanisms for the Future of Electrical Power
10:00 – 10:40	Sandra Staudt, Viktor Unterberger, Daniel Muschick, Michael Wernhart and René Rieberer Model-based control of absorption heat pumping systems
10:40 – 11:10	Coffee Break

11:10 – 11:50	Tobias Posielek and Johann Reger Observability Studies for Spacecraft Attitude Determination based on Temperature Data
11:50 – 12:30	Martin Kleindienst Observer-Based Temperature Estimation in Thermal Processing of Semiconductor Wafers
12:30 - 14:30	Lunch
14:30 – 15:10	Stefan Jakubek and Christoph Hametner Forecasting of COVID-19 Hospital Occupancy Using Differential Flatness
15:10 – 15:50	Julian Willkomm, Kai Wulf and Johann Reger Quantitative robustness analysis and control design of model- following control for nonlinear systems subject to model uncertainties
15:50 – 16:30	Thomas Baumgartner, Richard Seeber, Robert Bauer and Martin Horn  Compensating Frequency Converter Nonlinearity
18:00	Dinner

#### Wednesday Sep 7, 2022

Social Program (details will be announced in the opening session)