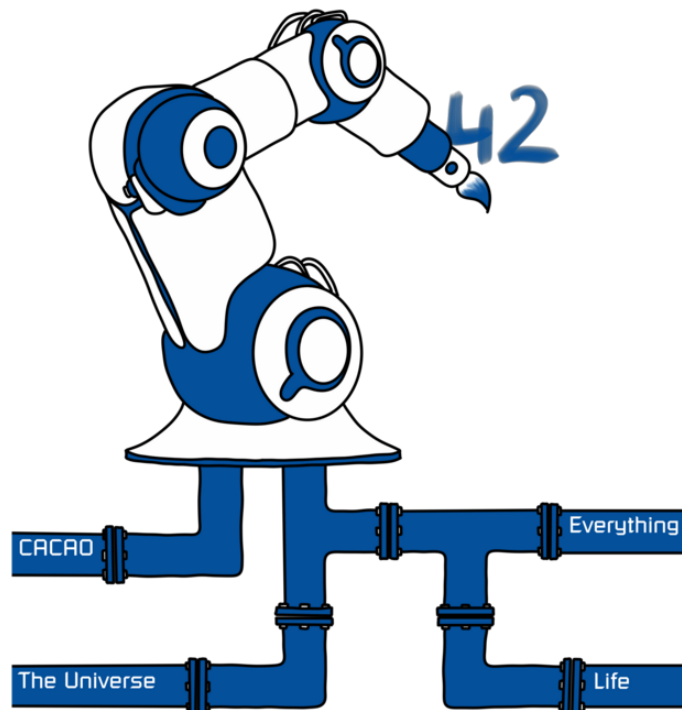# Conference on Applied, Computational and Algorithmic Optimization

September 25-26, 2023

dedicated to Marc C. Steinbach

# Program

# 1st CACAO day: Monday, September 25, 2023

| Time | Activity information |
|---|---|
| 09:00 - 09:45 | **Registration** (Room F335) |
| 09:45 - 10:00 | **Laudations** (Room B305) |
| | **Session 1** (Room B305, Chair: Christian Günther) |
| 10:00 - 10:45 (*) | **Hans Georg Bock**: *Inverse Optimal Control Problems and Applications to Modeling the Gait of Cerebral Palsy Patients* |
| 10:45 - 11:30 (*) | **Cristian Gebhardt**: *Some methods and applications in computational mechanics* |
| 11:30 - 11:50 | **Sebastian Probst**: *Studying and handling the varieties of dynamical systems in natural sciences and industry* |
| 11:50 - 13:00 | Lunch break |
| | **Session 2** (Room B305, Chair: Denis Khimin) |
| 13:00 - 13:45 (*) | **Martin Schmidt**: *15 years of gas network optimization* |
| 13:45 - 14:05 | **Jan Thiedau**: *Numerical studies for applications in the field of supply and disposal* |
| 14:05 - 14:25 | **Bernhard Michael Willert**: *Digitalization shapes the future of logistics* |
| 14:25 - 15:00 | Coffee break |
| | **Session 3** (Room B305, Chair: Senta Lange) |
| 15:00 - 15:20 | **Volker Schulz**: *Algorithmic Optimization - Now and Then* |
| 15:20 - 15:40 | **Djamal Oucherif**: *Demonstrating the potential impact of climbing Mount Stupid in many different areas of life: a case study* |
| 15:40 - 16:00 | **Lisa Hegerhorst-Schultchen**: *From university to today* |
| 16:00 - 16:30 | Small break |
| | **Marc Session** (Room C311, Chair: IfAM) |
| 16:30 - 17:30 | **Marc C. Steinbach** |
| 18:00 - | Conference Dinner (Restaurant Al-Dar) |

# 2nd CACAO day: Tuesday, September 26, 2023

| Time | Activity information |
|---|---|
| **Session 1** (Room B305, Chair: Jenny Schubert) | |
| 9:00 - 9:45 (*) | **Andreas Potschka**: *Parallel Preconditioners for Tree-Sparse Optimization Problems* |
| 9:45 - 10:05 | **Fleurianne Bertrand**: *Stress-based finite element methods for phase-field fracture optimal control problems* |
| 10:05 - 10:25 | **Denis Khimin**: *A more general approach to phase-field fracture optimal control problems* |
| 10:25 - 11:00 | Coffee break |
| **Session 2** (Room B305, Chair: Anne-Kathrin Wenske) | |
| 11:00 - 11:20 | **Senta Lange**: *Optimization models of contact problems in hybrid Data-Driven Computational Mechanics* |
| 11:20 - 11:40 | **Jenny Schubert**: *Artificial Intelligence* |
| 11:40 - 12:00 | **Anastasija Kartamysheva**: *My path to mathematical optimization* |
| 12:00 - 12:15 | **Final words** (Martin Steinbach, Thomas Wick) |