

## Vienna-Budapest Workshop on Optimization Vienna, January 15-17, 2025

Organizers: Radu Boț (University of Vienna), Tibor Illés (Corvinus University of Budapest)

### Wednesday, January 15, 2025 – University of Vienna, Faculty of Mathematics, BZ 02

09:55 **Opening**

10:00 – 10:40 **Marianna Eisenberg-Nagy** (Corvinus University of Budapest): *Matrix classes and linear complementarity problems*

10:40 – 11:20 **Tibor Illés** (Corvinus University of Budapest): *Parabolic target space approach for weighted monotone linear complementarity problems*

11:20 – 11:40 **Coffee break**

11:40 – 12:20 **Robert Csetnek** (University of Vienna): *Tikhonov regularization for monotone operators: dynamics*

12:20 – 13:00 **David Hulett** (University of Vienna): *Su-Boyd-Candès and Heavy Ball systems are equivalent up to time rescaling*

18:00 – \_\_\_\_\_ **Workshop dinner Restaurant I Vecchi Amici** (Liechtensteinstrasse 24)

### Thursday, January 16, 2025 – University of Vienna, Faculty of Mathematics, BZ 02

13:30 – 14:10 **Enis Chenchene** (University of Vienna): *Extra-Gradient method with flexible anchoring: strong convergence and fast residual decay*

14:10 – 14:50 **Petra Renáta Rigó** (Corvinus University of Budapest): *Parabolic target following framework for linear optimization*

14:50 – 15:00 **Coffee break**

15:00 – 15:50 (jointly with Vienna Seminar on Optimization) **Yurii Nesterov** (Corvinus University of Budapest): *Superlinear convergence for interior-point methods in parabolic target space*

15:50 – 16:30 **Rossen Nenov** (University of Vienna): *Differentiable regularization of the condition number of a matrix*

### Friday, January 17, 2025 – University of Vienna, Faculty of Mathematics, BZ 02

10:00 – 10:40 **Roland Török** (Corvinus University of Budapest): *Implementation of interior-point algorithms using the algebraic equivalent transformation technique*

10:40 – 11:20 **Markus Gabl** (University of Vienna): *Finding quadratic underestimators for optimal value functions of nonconvex all-quadratic problems via copositive optimization*

11:20 – 11:40 **Coffee break**

11:40 – 12:20 **Chiara Schindler** (University of Vienna): *On a Stochastic Differential Equation with correction term governed by a monotone and Lipschitz continuous operator*

12:20 – 13:00 **Alexander Posch** (University of Vienna): *Finding sparse solutions to linear systems with a Polyak step size*