

Fakultät für Mathematik

Oskar-Morgenstern-Platz 1 A-1090 Vienna Austria

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## ONE WORLD OPTIMIZATION SEMINAR

May 3<sup>rd</sup> 2021 @ 15:30 CEST (Central European Summer Time)

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## **On Solving Bilevel Programming Problems**

**Abstract.** A bilevel programming problem is a sequence of two optimization problems where the constraint region of the upper level problem is determined implicitly by the solution set to the lower level problem. It can be used to model a two-level hierarchical system where the two decision makers have different objectives and make their decisions on different levels of hierarchy. Recently more and more applications including those in machine learning have been modelled as bilevel optimization problems. In this talk, I will report some recent developments in optimality conditions and numerical algorithms for solving this class of very difficult optimization problems.

The link of the zoom-room of the meeting and the corresponding password will be announced the day before the talk on the mailing list of the seminar, to which one can subscribe on <a href="https://owos.univie.ac.at">https://owos.univie.ac.at</a>.