

Seminar 2021/2022

Study of convex Semi-infinite Programming problems: general approaches, applications, and open problems

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Problems of convex Optimization consist in search for extrema of convex functions in domains which are convex sets. Many times the success of the process of solution of such problems depends on the way how the feasible sets are described. The problems where the feasible sets are described with the help of a finite number of convex functions (constraint functions) belong to the convex Nonlinear Programming; such problems are rather well studied and there are solvers developed for them. In the case when the number of constraints is infinite, we deal with problems of Semi-infinite Programming.

In the talk, we present different approaches to solving convex SIP problems, and speak about the open questions and problems.