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“The Branch-and-Bound Method for Global Optimization”

This talk gives an introduction to Branch-and-Bound algorithms, a popular method to solve nonconvex global optimization problems. A main task in these algorithms is to compute bounds on the objective function on certain subregions of the feasible set. One possibility to obtain bounds is to use weak duality. The concept of primal and dual problems will be presented and advantages of dual bounds compared to other bounds will be discussed. The dual is not tractable for all types of optimization problems, but certain problem classes where the dual can be solved will be presented.

Tuesday, April 8, 2003
12:30-1:20
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