University of Puerto Rico Mayaguez Campus
Faculty of Arts and Sciences
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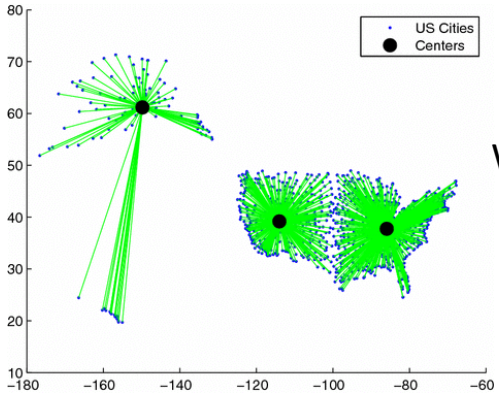
THE DEPARTMENT OF MATHEMATICAL SCIENCES PROUDLY PRESENTS

COLLOQUIUM

2020-21-II

Solving a continuous multi-facility location problem by DC algorithms



Mr. Anuj Bajaj

Wayne State University

Feb 18, 2021

We introduce a new approach to solve multifacility location problems, which is based on mixed integer programming and algorithms for minimizing differences of convex (DC) functions. The main challenges for solving the multifacility location problems under consideration come from their intrinsic discrete, nonconvex, and nondifferentiable nature. We provide a reformulation of these problems as those of continuous optimization and then develop a new DC type algorithm for their solutions involving Nesterov's smoothing. The proposed algorithm is computationally implemented via MATLAB numerical tests on both artificial and real data sets. This is based on joint work with B. Mordukhovich, N. M. Nam, and Tuyen Tran.

enlace: meet.google.com/urm-rhmx-dhw
hora: 10:30 am.

Ph.D. in CISE
University of Puerto Rico