Infeasible Full-Newton-Step Interior-Point Method for Linear Complementarity Problems

Talk

Goran Lešaja

Georgia Southern University

goran@georgiasouthern.edu

In this talk, we present an infeasible full Newton-step Interior-Point Method for Linear Complementarity Problems. The advantage of the method, in addition to starting from an infeasible starting point, is that it uses full Newton-steps, thus avoiding the calculation of the step size at each iteration. However, by suitable choice of parameters iterates are forced to stay in the neighborhood of the central path, thus, still guaranteeing the global convergence of the method. The number of iterations necessary to find epsilon-approximate solution of the problem matches the best known iteration bounds for these types of methods.

Section: 17.

.