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**Camilo Ortiz\*** ([camior@gatech.edu](mailto:camior@gatech.edu)), School of Industrial and Systems Engineering, Georgia Institute of Technology, 765 Ferst Drive, NW, Off. 325, Atlanta, GA 30332-0205, **Renato D.C. Monteiro** ([monteiro@isye.gatech.edu](mailto:monteiro@isye.gatech.edu)), School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0205, and **Benar F. Svaiter** ([benar@impa.br](mailto:benar@impa.br)), IMPA, Estrada Dona Castorina 110, Rio de Janeiro, 22460-320, Brazil. *Implementation of a Block Decomposition Algorithm for Solving Large-Scale Conic Optimization Problems.*

A recent work by Monteiro and Svaiter (2010) studied the iteration complexity of block decomposition methods for solving monotone variational inequalities and convex optimization problems. In this talk we review these methods and their corresponding complexity bounds. We also report very encouraging computational results comparing our methods with the second order algorithm SDPNAL (X. Zhao, D. Sun, and K. Toh) and the boundary point method introduced by J. Povh, F. Rendl, and A. Wiegale. The results obtained on a varied collection of large scale conic problems consisting of both nonnegative vector and/or positive semidefinite matrix variables are quite promising. (Received January 19, 2011)