1098-90-30 **Yunlong He** and **Renato D C Monteiro*** (monteiro@isye.gatech.edu), School of ISyE, Georgia Tech, Atlanta, GA 30332. *Accelerating block-decomposition first-order methods for solving generalized saddle-point and Nash equilibrium problems.*

This talk considers the generalized (two-player) Nash equilibrium (GNE) problem with a separable non-smooth part, which is known to include the generalized saddle-point (GSP) problem as a special case. We consider solving these problems by an accelerated version of the block-decomposition HPE method where the block-subproblems are approximately solved by a Nesterov-type accelerated method. Since this block-decomposition variant is able to take large stepsizes, it can substantially outperform both theoretically and computationally other existing zero-th order methods on many relevant GSP and GNE instances. (Received December 06, 2013)