## 1107-90-64Hande Y Benson\* (benson@drexel.edu), 3141 Chestnut Street, Philadelphia, PA 19104, and<br/>David F Shanno. Cubic Regularization in Quasi-Newton Methods.

Regularization techniques have been used to help existing algorithms solve "difficult" nonlinear optimization problems. Just over the last decade, regularization has been proposed as a remedy to handle equality constraints, equilibrium constraints, and other sources of nonconvexity, to bound Lagrange multipliers, to identify infeasible problems. In this talk, we will focus on the application of cubic regularization in the context of quasi-Newton methods. (Received December 22, 2014)