Rommel G Regis* (rregis@sju.edu), Saint Joseph's University, Math & CS Dept., 5600 City Avenue, Philadelphia, PA 19131. On the Convergence of Adaptive Stochastic Search Methods for Continuous Global Optimization.

There are many results on the convergence of stochastic search methods for continuous global optimization. However, most of these convergence conditions are cumbersome to verify for algorithms that are used in practice. Moreover, some of these convergence results only apply to uniform distributions. This talk will present some simple convergence conditions for a general class of adaptive stochastic global optimization algorithms. In addition, this talk will also present a convergence result on global optimization algorithms that utilize elliptical distributions such as the multivariate Gaussian and Cauchy distributions. (Received September 16, 2008)