Title: Modeling in the Spirit of Markowitz Portfolio Theory in a Non Gaussian World

Authors: Tapen Sinha (will participate in AFIR) and Rajeeva Karandikar (will not participate in AFIR)

Abstract: Most financial markets do not have rates of return that are Gaussian. Therefore, the Markowitz mean variance model produces outcomes that are not optimal. We provide a method of improving upon the Markowitz portfolio using Value at Risk and Median as the decision making criteria. We have created an algorithm (for which a patent is pending) for finding an approximately efficient frontier outside of the mean-variance model.