Carole Bernard and Stephan Sturm* (ssturm@wpi.edu), Department of Mathematical Sciences, 100 Institute Road, Worcester, MA 02111. Rationalizing Behavioral Portfolio Choice. Preliminary report.

Classical portfolio optimization theory postulates that investors' preferences are rational and the optimization criterion is expected utility, for some increasing and concave utility function. This contrasts with with empirical finding of cognitive psychology. In particular, small extreme events are usually overweighted by investors, losses and gains far away from the reference point have less impact and, losses are usually feared more than gains. These findings lay the basis for the theory behavioral portfolio choice. In this talk we try to answer the question if (resp. under which conditions), a given behavioral portfolio choice in a general incomplete semimartingale market can be replicated in the rational expected utility framework. (Received August 11, 2015)