FRANÇOIS WATIER, University of Quebec in Montreal
Mean-variance portfolio under a Heston volatility model

We study a mean-variance investment problem in a continuous-time brownian motion setting where the stock's volatility component is stochastic and driven by a mean-reverting Heston process. We construct an optimal strategy through the solutions of BSDEs (backward stochastic differential equations). We will also give sufficient conditions under which an explicit analytical expression is available for the optimal portfolio.