On influence of various SGD methods in deep pricing in rough volatility models

HANA KOPINCOVÁ

(in collaboration with Jan Pospíil)

University of West Bohemia, Czech Republic.

A common approach to valuing financial derivative securities involves choosing a model and then determining its parameters to fit the volatility or price surface as closely as possible. We refer to this as the model calibration approach (MCA). Although there exists several recent papers that try to apply the MCA to rough fractional models, none of them tries to optimize the training phase by choosing a suitable stochastic gradient descent (SGD) method. The aim of this talk is to present different Adam-type SGD methods and their influence to the calibration results.