

Bayesian Filtering of Asset Premia (Project)

Description

The Risk Premia Embedded in Index Options” shows the importance of a model with self-exciting tail risk factor for characterization of option implied risk neutral density. For estimating this type of model, we need to use techniques from Bayesian inference. In order to achieve this task, we provide ready to use high performance software to estimate complex parametric (realistic) asset price models to extract time-varying volatility, jump intensities, tail risk and resulting premia. Applications run from Euro-area to US options and futures. Please get in touch if you like to work in that field. Please submit a grade report and CV to maxim.ulrich@kit.edu.

Literature

“The Risk Premia Embedded in Index Options”

<https://www.sciencedirect.com/science/article/pii/S0304405X15000987>

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