

## MIXED FRACTIONAL BROWNIAN MOTION: THE FILTERING PERSPECTIVE

**P.Chigansky**, The Hebrew University of Jerusalem, Israel, pchiga@mscc.huji.ac.il

**M. Kleptsyna**, Universite du Maine, France, marina.kleptsyna@univ-lemans.fr

We present an alternative approach to studying the properties of the mixed fractional Brownian motion, based on the filtering theory of Gaussian processes. It yields a new proof of the regularization theorem due to P. Cheridito and resolves an open question, concerning statistical estimation of the unknown drift parameter observed in mixed fractional noise.