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Parameter estimation of general Gaussian processes

The statistical analysis for fractional Gaussian processes, typically ones which are based on fractional Brownian motion and related noises, is relatively recent. The development of Malliavin calculus on Wiener space allowed to study such models. In this talk, we present a general framework for parameter estimation problems for fractional Gaussian processes. We construct estimators based either on continuous or discrete observations, and then we study the asymptotic properties of these estimators. The examples we cover are for drift parameter estimation in various aforementioned fractional-noise-driven Ornstein-Uhlenbeck processes.