

1150-60-601

Igor Cialenco*, 10 W. 32nd St., Room 208, Chicago, IL 60616. *Recent Advances in Statistical Inference for Stochastic PDEs.*

We consider a parameter estimation problem for finding the drift and volatility coefficient for a large class of parabolic Stochastic PDEs driven by space-time noise (white in time, and possible colored in space). We will discuss several approaches to this problem, including the spectral approach where the observations are done in the Fourier space, and discrete sampling where the observer takes measurements in the physical domain. We will present some general results on asymptotic properties of several types of estimators and discuss some open problems and future research directions. (Received July 16, 2019)