

1143-60-325

Yanghui Liu* (liu2048@purdue.edu). *LAN property for SDEs with additive fractional noise and continuous time observation.*

The Local Asymptotic Normality property (LAN) is a fundamental concept in asymptotic theory of statistics, which was developed by Le Cam, 1960. The main application of the LAN property is that if LAN holds true it provides a (usually sharp) asymptotic lower bound for the risk with respect to a loss function. In this talk, we consider a stochastic differential equation with additive fractional noise with Hurst parameter $H > 1/2$, and a non-linear drift depending on an unknown parameter, and we show the LAN property of this parametric model when the solution is observed continuously on the time interval. (Received August 17, 2018)