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**Hyun-Jung Kim\*** ([hkim129@iit.edu](mailto:hkim129@iit.edu)), Department of Applied Mathematics, Illinois Institute of Technology, 10 W. 32nd Street, Room 220, Chicago, IL 60616. *Drift Estimation for Discretely Sampled SPDEs.*

We consider the drift estimation for a fractional stochastic heat equation driven by an additive space-time noise in Fourier domain. The aim of this talk is to introduce MLE type estimators for the drift coefficient and to study asymptotic properties of them when both the number of Fourier modes and the time increase to infinity. In the first part of this talk, we consider the usual MLE with continuous time observations of the Fourier coefficients of the solutions, and show the asymptotic properties such as consistency, asymptotic normality and optimality in the mean-square sense. In the second part of this talk, we investigate the natural time discretization of the MLE and provide a rigorous asymptotic analysis of the discretized version of the estimator by establishing sufficient conditions on the growth rates that guarantee its consistency and asymptotic normality. This is a joint work with Igor Cialenco and Francisco Delgado-Vences. (Received June 24, 2019)