## 1086-VI-414 Fei Xing\* (fxing@utk.edu), 227 Ayres Hall, 1403 Circle Drive, Knoxville, TN 37996. Almost sure asymptotics for Ornstein-Uhlenbeck processes of Poisson potential.

The objective of this presentation is to study the large time asymptotic of the exponential moment:  $\mathbb{E}_x \exp\left\{\pm \int_0^t V(X(s)) \, ds\right\}$ , where  $\{X(s)\}$  is a *d*-dimensional Ornstein-Uhlenbeck process and  $\{V(x)\}_{x \in \mathbb{R}^d}$  is a homogeneous ergodic random Poisson potential. It turns out that the positive/negative exponential moment has  $e^{ct}$  growth/decay rate, which is different from the Brownian motion model studied by Carmona and Molchanov in 1995 for positive exponential moment and Sznitman in 1993 for negative exponential moment. (Received August 30, 2012)