

1127-35-329

Changbing Hu* (changbing.hu@louisville.edu), Natural Science Building 328, University of Louisville, Louisville, KY 40292. *Point-wise estimates of semigroup generated by nonlocal dispersal operators and its applications in biology.* Preliminary report.

In this talk we introduce some techniques to estimate the semi-group generated by some nonlocal operators, which have been studied extensively in recent years. The major tools for our results are the Fourier and inverse Fourier transforms. These estimates are used to study some non-local differential models which describe the growth and spread of a species under a shifting habitat, physically caused by the climate change. Also these point-wise estimates have their own interest in the study of nonlocal differential equations. (Received February 06, 2017)