
MING MEI, Champlain College St.-Lambert

Threshold convergence results for nonlocal time-delayed diffusion equations

In this talk, we consider the asymptotic behavior for nonlocal dispersion Nicholson blowflies equation. By the method of Fourier transform, we first derive the decay estimates for the fundamental solutions with time-delay. Then, we show the threshold results with optimal convergence rates for the original solution to the constant equilibrium. The lower-higher frequency analysis plays a crucial role in the proof. This talk is based on a recent joint work with Rui Huang and Zhuangzhuang Wang published in *J. Differential Equations* (2023).