

APPLIED DYNAMICAL SYSTEMS SEMINAR

KPP type fronts for systems

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Korman 245

In this talk, I will present some recent results concerning the system of two reaction diffusion equations which provides a natural link between classical Kolmogorov-Piskunov-Petrovsky (KPP) equation and the system describing quadratic autocatalysis. Specifically, I will present results on existence and non-uniqueness of positive traveling front solutions and their stability. I will also present results concerning long time behavior of the system and describe an interesting metastable pattern which the system tends to exhibit in the certain parameters range. This is a joint work with A. Ghazaryan and A. Virodov.