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Title

Uniqueness and stability of semi-wavefronts for KPP-Fisher equation with delay

Abstract:

In this talk I will preset some recent results on the stability and uniqueness of semi-wavefronts of the equation u_t(t,x)=u_{xx}(t,x)+u(t,x)(1-u(t-h,x)), t >0, x in \R; where the parameter h>0 is a delay. The uniqueness (up to translations) of semi-wavefronts (i.e., solutions in the form u(t,x)=\phi_c(x+ct) satisfying $\phi_c(-\infty)=0$ and $\liminf_{z\to +\infty}\phi_c(z)>0$) is `largely open' problem. By a simple approach we have obtained the uniqueness (up to translations) of semi-wavefronts for all speed, i.e., c >= 2, and the stability on each semi-interval (-\infty, N], N in \R, if c >= 2\sqrt{2}, for all h>0.

Martes 16 de Octubre a las 17:00 hrs, Sala de Seminarios John Von Neumann CMM, Torre Norte, Piso 7, de Beauchef 851.