Departmental Colloquium

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Wednesday, August 29, 2018
2:00pm, HH-3017

Curved fronts in heterogeneous media

Abstract:

In this talk we dicuss the existence and qualitative properties of conic shaped traveling fronts in reactive-diffusive media with an underlying drift. We employ a Perron type arguement and the maximum principle to construct sub and super solutions to the problem. These conic fronts are composed of planar pulsting traveling waves propatating to the left and right. This problem is related to flame propatation in advective settings. The speed is found in terms of well known planar speeds.