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Travelling fronts for kinetic equations with delay

Abstract

We consider a model for the morphology and growth of the fungus *Phytophthora*, a plant pathogen with a highly damaging impact on forestry economy with features related to the Ash die back disease. The model is based on a kinetic equation for the spread of the density of hyphen tips, whereas the branching of tips induces a delayed growth term. We prove the existence of travelling front solutions for this model and study the effect of the delay on the speed of these fronts. This is joint work with J. Mueller from TU Munich.