Discontinuous stationary solutions to reaction-diffusion-ODE systems

Szymon Cygan
Uniwersytet Wroclawski (Poland)

`Szymon.Cygan@math.uni.wroc.pl`

Abstract

In this talk I will present a construction of discontinuous stationary solutions to general reaction-diffusion-ODE systems as well as a sufficient conditions for their stability. This is a joint work with Anna Marciniak-Czochra, Grzegorz Karch and Kanako Suzuki.

These results are contained in our works:

– S. Cygan, A. Marciniak-Czochra, G. Karch, and K. Suzuki, *Instability of all regular stationary solutions to reaction-diffusion-ODE systems*, preprint (2021), arXiv:2105.05023.

– S. Cygan, A. Marciniak-Czochra, G. Karch, and K. Suzuki, *Stable discontinuous stationary solutions to reaction-diffusion-ODE systems*, preprint (2021).