

## Abstract

This talk is concerned with propagation phenomena in a diffusion system with the Belousov-Zhabotinskii chemical reaction in high-dimensional space. We first show that the system admits V-shaped traveling fronts in  $\mathbb{R}^2$ . Then using the V-shaped traveling fronts, we show that there exists a new type of entire solution originated from three moving planar traveling fronts, and evolved to a V-shaped traveling front as time changes. Finally, we show that all the transition fronts of the system in  $\mathbb{R}^N$  share the same global mean speed by constructing suitable radially symmetric expanding and retracting sub-super solutions.