

Delphine Salort

Some PDE models in neurosciences

We are going to present several PDE models that describe the evolution of a network of neurons that interact via their common statistical distribution. In these different models we will focus above all on qualitative and asymptotic properties of solutions describing synchronization phenomena. Approach and technical difficulties differ from model to model: we will also discuss this aspect. This talk is based on collaborations with J. A. Carrillo, K. Pakdaman, B. Perthame and D. Smets.