

Reaction cross diffusion systems as limits of reaction diffusion systems

Laurent DESVILLETES
<http://laurent.desvilletes.free.fr/>



Reaction cross diffusion systems naturally appear in population dynamics and are known to produce Turing-like patterns. We explain how those systems can be seen, in specific examples (competition systems, prey-predator systems), as relaxation limits of standard reaction diffusion equations. We present rigorous results of convergence for the time-dependant systems, as well as for the steady systems.