

# Séminaire EDP de l'ERC ReaDi

*Equations de réaction-diffusion, propagation et modélisation*  
Henri Berestycki

Les membres de l'ERC ReaDi sont heureux d'annoncer le lancement d'un cycle de séminaires autour des Equations aux Dérivées Partielles qui se tiendront un mercredi sur deux à l'École des Hautes Etudes en Sciences Sociales à commencer du mercredi 11 Février. Retrouvez toutes les informations sur le séminaire : <http://readi-project.weebly.com/pde-seminar.html>.

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Septième séance : **mercredi 22 Avril à 11h15**  
Salle 466, EHESS, 190-198 avenue de France, 75013 - Paris

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**Emerci Bouin**, *Ecole Normale Supérieure de Lyon, UMPA*

Title: **Propagation in models of kinetic type from biology**

Résumé: In this talk, we will be interested in biological invasions for which the (macroscopic) spatial movement is highly influenced by a microscopic structure of the populations. From experiments, one can see that this happens for collective motion of bacteria and dispersal evolution in e.g. cane toads populations. Models of kinetic type are thus needed to describe accurately such kind of invasions. I will present some results concerning the study of propagation in two types of models. First, kinetic reaction-transport equations, inspired by bacterial dispersal. Second, reaction-diffusion-mutation equations, modeling dispersal evolution. We will discuss two points of view : the (non-)existence of travelling waves, and geometric optics.

Organisateurs : Jian Fang, Grégory Faye, Andrea Tellini et Alessandro Zilio



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