

Du  
**16**  
MAI.  
2017  
au  
**18**  
MAI.  
2017

08h00  
-  
18h00

## 2017-T2 STOCHASTIC DYNAMICS OUT OF EQUILIBRIUM

### Life sciences

IHP

#### INSCRIPTION

Life sciences propose various challenging models of interacting units. Examples of units are bacteria in a colony, cells in a multicellular organism, individuals in a community, nodes of a computer network. Since one faces systems with a very large amount of components and because noise is typically a key ingredient, tools and models non-equilibrium statistical mechanics play a central role. The analysis is led both at a microscopic level to follow and analyze the single unit dynamics, and on a large scale where often one deals with PDE models that capture the behavior of coarse grained observables.

This 3-4 day workshop will gather researchers working in this field with different origins and sensibilities (statistical mechanics, PDE, biology,...). The aim is on one hand to understand the impact that recent advances in non-equilibrium statistical mechanics and PDE analysis can have on life sciences and, on the other hand, to widen the spectrum of models and phenomenologies tackled by mathematicians and physicists.



## **INSTITUT HENRI POINCARÉ - UAR839**

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### **HORAIRES**

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.