

## Ideas that Keep us Awake

Salle Urbain, ESPCI Paris Tech, 25 May 2016

- 9:00-9:10 Jean-François Joanny  
*Welcome*
- 9:10-9:30 Regis Ferrière (IBENS)  
*Does ecology matter to evolution (and vice-versa)?*
- 9:30-9:50 Ivan Matic (INSERM)  
*Estimating mutation rates: How to separate mutations from their effect on fitness?*
- 9:50-10:10 Amaury Lambert (UPMC)  
*Trees within trees and the species problem*
- 10:10-10:40 Break** (salle Champetier)
- 10:40-11:00 Virginie Orgogozo (Monod)  
*Abstract representations in biological organisms*
- 11:00-11:20 Jean Baudry (ESPCI)  
*Unculturable microorganisms*
- 11:20-11:40 David Bensimon (LPS, ENS)  
*What are the constraints on evolution?*
- 11:40-12:00 Silvia De Monte (IBENS)  
*Coupling phenotypic heterogeneity to demography*
- 12:00-12:20 Boris Shraiman (UCSB)  
*Survival versus growth and natural selection in the long term*
- 12:20-12:40 Jérôme Bibette (ESPCI)  
*Semi-permeable capsules for high throughput microbial culture*
- 12:40-14:00 Lunch** (salle Champetier)
- 14:00-14:20 Jacques Ninio (LPS, ENS)  
*The blind spots of population genetics*
- 14:20-14:40 Philippe Huneman (IHPST)  
*Selection, neutrality, individuality: issues about coarse-graining and scale decoupling*
- 14:40-15:00 Jean-Baptiste Boulé (MNHN)  
*Some thoughts about time and clocks in biology*
- 15:00-15:20 Laurent Boitard (MilliDrop)  
*Living in a droplet*
- 15:20-15:40 Henrique Teotonio (IBENS)  
*Adaptation to temporally fluctuating environments by the evolution of maternal effects*

**15:40-16:00 Break** (salle Champetier)

16:00-16:20 François Taddei (CRI)  
*Are we undergoing another major evolutionary transition?*

16:20-16:40 Jean-Marc Ghigo (Pasteur)  
*Biofilm-specific functions: Grail or/and hoax?*

16:40-17:00 Nicolas Desprat (LPS, ENS)  
*Nucleation out of the nucleus*

17:00-17:20 Georges Chapouthier (CNRS)  
*The complexity in mosaics*

17:20-17:40 Olivier Tenaillon (INSERM)  
*Quantifying organismal complexity*

17:40-18:00 Paul Rainey (ESPCI)  
*When nothing makes sense there is something to discover: do REPINs and RAYTs conspire to edit DNA and protect against phage?*

**18:00-19:30 Aperitifs, posters and yacker** (salle Champetier)

19:30 Dinner (for invited speakers)