

Program of the two-day workshop
«**Statistical Physics and Information Processing in Biology**»
Institut Henri Poincaré, Paris
December 10-11, 2012
(organized by V Hakim and M Vergassola)

December 10

9h00 Registration (and coffee)
9h15 Introductory remarks
9h30 **PR ten Wolde** Multiplexing biochemical signals
10h15 **N Gov** Active noise in biology : is it an effective temperature ?
11h Coffee break
11h30 **F Battaglia** Building semantic memories by spontaneous sleep replay
12h15 **R da Silveira** High-fidelity coding with correlated and diverse neurons
13h Lunch (at IHP)
14h30 **H Sompolinsky** On the computational principles of sensory processing
15h15 **M Mezard** Occam's razor in massive data acquisition
16h Coffee break
16h30 **A Celani** Chemotactic responses in E. coli
17h15 **E Aurell** Demons and dragons large and small

December 11

9h30 **M Weigt** Hopfield-Potts modeling of sequence covariation in protein families:
from principal component to direct coupling analysis
10h15 **M Santolini** From cis-regulatory DNA motifs to tissue specific expression
11h Coffee break
11h30 **K Sneppen** Epigenetics in Cis and multistability in olfactory differentiation
12h15 **P François** In silico evolution of phenotypic models: immune early recognition
13h Lunch (at IHP)
14h30 **I Giardina** Maximum entropy models for flocks of birds
15h15 **T Shimizu** Experimental dissection of bacterial chemotaxis strategies
16h Coffee break
16h30 **E Frey** Fluctuation effects in evolutionary games