

# Laurent U. Perrinet

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## Research interests

I am interested in bridging the gap between the structure and the function of neural systems by showing how they optimally adapt to the statistics of natural environments.

## Areas of specialization

Spatio-temporal inference in low-level sensory areas.  
Motion Perception.  
Free-energy and active perception.

## Education

1999-2003	PhD in Cognitive Neuroscience, ONERA/DTIM, Toulouse (France)
1993 - 1998	MSC in Engineering SUPAÉRO (Toulouse, France), one of the leading French Engineering Schools ("Grandes Ecoles"). Specialization in stochastic models for signal and image processing.

## Selected publications

2012	Karl Friston, Rick A. Adams, Laurent U. Perrinet and Michael Breakspear, "Perceptions as Hypotheses: Saccades as Experiments", <b>Frontiers in Psychology</b> .
2012	Claudio Simoncini, Laurent U. Perrinet, Anna Montagnini, Pascal Mamassian and Guillaume S. Masson, "More is not always better: dissociation between perception and action explained by adaptive gain control", <b>Nature Neuroscience</b> (2012).
2012	Paula S. Leon, Ivo Vanzetta, Guillaume S. Masson and Laurent U. Perrinet, "Motion Clouds: Model-based stimulus synthesis of natural-like random textures for the study of motion perception", <b>Journal of Neurophysiology</b> .
2012	Laurent U. Perrinet and Guillaume S. Masson, "Motion-based prediction is sufficient to solve the aperture problem", <b>Neural Computation</b> .
2011	Guillaume S. Masson and Laurent U. Perrinet, "The behavioral receptive field underlying motion integration for primate tracking eye movements", <b>Neuroscience and biobehavioral reviews</b> .