Laurent U. Perrinet

Researcher in Computational Neuroscience Institut de Neurosciences de la Timone UMR 7289, CNRS / Aix-Marseille Université 27, Bd. Jean Moulin, 13385 Marseille Cedex 5, France

URL: https://laurentperrinet.github.io

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 leadin

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

JOURNAL ARTICLES

Mina A Khoei, Guillaume S Masson et Laurent U Perrinet. "The flash-lag effect as a motion-based predictive shift." **PLoS Computational Biology**.

Karl Friston, Rick A. Adams, Laurent U. Perrinet and Michael Breakspear, "Perceptions as Hypotheses: Saccades as Experiments", Frontiers in Psy-

chology.

Воок

2012

2015

Laurent U. Perrinet, "Role of homeostasis in learning sparse representations",

Neural Computation.

Laurent U. Perrinet, Manuel Samuelides and Simon Thorpe, "Coding static natural images using spiking event times: do neurons cooperate?", IEEE Transactions on Neural Networks.

Gabriel Cristobal, Laurent U Perrinet et Matthias S Keil, editors. "Biologically Inspired Computer Vision." Wiley-VCH doi: 10.1002/9783527680863.