SEMPARIS – Séminaires en région parisienne

Forum de Physique Statistique @ ENS

Mercredi 26 Fevrier 2020, 12 :00
LPENS, Conf. IV
Domaines : cond-mat.stat-mech

Titre : *Learning to soar*

Orateur : **Massimo Vergassola (ENS Paris)**

Résumé : *Thermal soaring is a major natural instance of animal behavior in the presence of complex orientation cues. The problem is deeply rooted in physics and biology, with the prowess by birds constituting a challenge for artificial systems built for technological applications. I will first introduce the natural phenomenology, then review the physics that controls the complexity of the orientation cues, and finally show how machine learning methods are brought to bear on identifying effective flying strategies. Results are applied to gliders in the field, and provide insight into the decision processes and the sensorimotor cues utilized by birds.*