

# Learning to navigate turbulent environments

zoom:

<https://epfl.zoom.us/j/84048962946>



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Thermal soaring is a major natural instance of animal behavior in the presence of complex orientation cues generated by turbulence in natural environments. The problem is deeply rooted in physics and biology, with birds' prowess 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.

Monday

December 14

16:15

zoom

