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Laboratoire PMMH
10 rue Vauquelin, 75231 Paris Cedex 05



Séminaire PMMH

Bureau d'Études, Bâtiment L, 2^{ème} étage

Vendredi 17 avril 2015, 11h00-12h00

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Brown University, Providence

Aeromechanics of Bat Flight : From Live Animals to Robotic Models

The elegance and maneuverability of bats during flight is unparalleled in both the natural and the man-made world, and they serve as a source of inspiration for scientists trying to understand the evolution of flight and for engineers designing highly agile flight vehicles. We have been exploring this rich research area for several years with studies ranging from live animal flights to instrumented robotic wings. In this talk we will discuss several aspects of bat flight mechanics and energetics, including characteristics of their flight performance, the role played by their compliant wing membrane and articulated skeleton, and the structure of the wake.