CICLO DE SEMINARIOS 2010

SMAT-C Soft Matter Research and Technology Center

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"Flapping wings and biomimetic propulsion"

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Flapping motion is the basis of locomotion in insects, birds, and fish. For insects and birds the flapping motion not only generates the thrust force but also the lift force that allows them to stay aloft. These propulsive and manoeuvring forces are produced owing to the interaction between flapping wings and fins and their surrounding fluids. Although many studies on actual flapping extremities have been motivated looking forward to a better understanding of this form of propulsion, a wide set of open questions remain especially concerning the ultimate goal of using flapping wings as a means of producing propulsive and manoeuvring forces in man-made devices. From a practical point of view, simple but important basic questions such as, for instance, the optimal flapping frequency and amplitude that should be used to drive forward flapping flight are still looking for a definitive answer.

M a r t e s 27 a b r i l , 14:00 h o r a s

Sala Conferencias, Tercer Piso - Departamento de Física
Universidad de Santiago de Chile