## Abstract Submitted for the DFD07 Meeting of The American Physical Society

Passive Wing Pitching in Insect Flight ATTILA BERGOU, Z. JANE

WANG, Cornell University — We recently found that the wings of a flying insect can be passively oriented by aerodynamic forces and the inertia of the wing itself. Building upon this result, we investigate the role that the gross morphological parameters of the wing (e.g. the position of the torsion axis) play in the passive orientation of the wing. In addition, we explore the consequences that passive pitching has on the wing kinematics of an insect.

Attila Bergou Cornell University

Date submitted: 03 Aug 2007 Electronic form version 1.4