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**Wing Deformation and Control in Insect Flight** AT-  
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HEN, JANE WANG, Cornell University — By computing the aerody-  
namic forces on the wings of flying insects, we have previously shown  
evidence that the wing pitching associated with flapping flight can be  
passive. Presently, we extend this work to show that it is possible to  
extract information about muscle control directly from experimental ob-  
servations. Using a combination of numerical simulations and novel vi-  
sualization of experimental data we analyze the torsional waves present  
during wing pitching and infer about the presence of muscle control  
during various flight sequences.

Prefer Oral Session  
 Prefer Poster Session

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