

Abstract Submitted  
for the DFD10 Meeting of  
The American Physical Society

**Measurement** **of**  
**Cytoplasmic Streaming in *Drosophila Melanogaster*** SUJOY GANGULY,  
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of Cambridge — During stage 9 of *Drosophila melanogaster* oogenesis flow of the  
oocyte cytoplasm, driven by kinesin 1 motor protein is observed. This cytoplasmic  
streaming is analyzed by PIV in both wild type and kinesin light chain mutants,  
revealing striking statistical differences. Further measurements of the rheology of  
the oocyte allow for estimations of the mechanical energy needed to generate the  
observed flows.

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Date submitted: 06 Aug 2010

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