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Aerodynamics of parachuting in tiny insects


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Title: Aerodynamics of parachuting in tiny insects.

Authors: Michael Senter*, Kristen Armel*, Laura Miller.
(starred authors will be at conference to present the poster)

Abstract:

The flight of the smallest insects is not yet fully understood. Tiny insects such as thrips and fairyflies have adapted to their intermediate Reynolds number world by developing wings consisting of small, membranous areas to which long bristles are attached. The bristles form part of the effective wing of the insects. Passive flight is likely an important component of long-distance dispersal in tiny insects. Our work uses CFD tools such as IB2d simulations to analyze passive flight of thrips as the model species of interest. We will present results of simulations on the velocity of parachuting thrips with different wing models.