

# Ant rafts and maggot flows

David L. Hu<sup>1</sup> and Olga Shishkov<sup>1</sup>

**We present two model systems for studying swarm behavior in insects. Fire ants link their bodies together to build waterproof rafts to survive floods. We conduct mechanical tests to show that ant rafts can flow like a liquid or spring back like a solid. These properties can enhance their chance of survival on rough waters. In contrast, the black soldier fly larva is an insect that lives on dry land, but deals with large numbers of its neighbors as it feeds on rotting fruit and carcasses. When feeding around food objects, we show that the maggots generate coherent flows, which can increase the average feeding rate of the colony. In both systems, the continuous motion of insects leads to many of the desirable properties observed.**

## REFERENCES

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<sup>1</sup>Schools of Mechanical Engineering and Biology, Georgia Institute of Technology. E-mail: hu@me.gatech.edu