

Quantifying Dissipation in Active Matter

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The intersection of stochastic thermodynamics and active matter is a very exciting and active field with great potential for opening new horizons for both disciplines. There are a number of important questions in the field: (1) How can we quantify dissipation? (2) How can we control active matter? (3) How can we build thermodynamically-consistent frameworks? (4) What is the role of momentum conservation? (5) Why should we care about dissipation? To answer these questions, we need to incorporate a minimal amount of the mechanistic aspects of active matter. In this talk, I will address these questions and present concrete examples in which one can obtain partial answers.

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