Dynamics of polymers with time-dependent activity

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Abstract

Polymers affected by active processes are found to be useful models to study a wide range of phenomena such as cell motility, bacterial motion or genome organization. Here we propose a minimal model for polymers with dynamic activity: The active force is imposed only on a small segment of polymer, which slides along the polymer with a constant frequency, introducing a new time-scale to the usual models for active polymers. We show that such a minimal model is capable of capturing a rich set of behaviors: from persistence motion to run and tumble dynamics.

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مکان(کلاس مجازی آقای دکتر اجتهادی) :

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