

Abstract Submitted
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Time-dependent mechanical response of the cytoskeleton¹ NASRIN AFZAL, MICHEL PLEIMLING, Virginia Tech — Motivated by a series of experiments that study the response of the cytoskeleton in living cells to time-dependent mechanical forces, we investigate, through Monte Carlo simulations, a three-dimensional network subjected to perturbations. After having prepared the system in a relaxed state, shear is applied and the relaxation processes are monitored. We measure two time quantities and discuss the possible implications of our results for relaxation processes taking place in the cytoskeleton.

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Michel Pleimling
Virginia Tech

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