

Abstract Submitted  
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**Dynamic fluctuations of elastic lines in three-dimensional random environments** SEBASTIAN BUSTINGORRY, Centro Atomico Bariloche, Argentina, LETICIA CUGLIANDOLO, LPTHE-Jussieu and LPT-ENS, Paris, DANIEL DOMINGUEZ, Centro Atomico Bariloche, Argentina — Elastic lines embedded in three-dimensional random environments present a low temperature glassy regime, with aging characterized by multiplicative scaling. We studied the scaling properties of the distribution functions of different dynamical observables: the roughness, the mean-squared-displacement and its associated response function. Following the multiplicative scaling hypothesis, we numerically show that the distribution functions depend only on the mean scaled value of the variables, and not on the different time scales involved. These results could be extended to the scaling of distribution functions in critical-like systems.

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