

Abstract Submitted
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Fluctuations and Phase Transition-Like Phenomena of a Filled Elastomer Under Deformation XIAORONG WANG, MINDAUGAS RACKAITIS, Bridgestone CRT — Fluctuations, critical phenomena and phase transitions have drawn much attention for many years. But, no report anticipates that an elastomer containing fillers under gentle deformations will show similar effects. In this presentation, we show that a filled rubber system under about 2% strain may display feature fluctuations that could be associated with a transition from an elastic solid state to a dispersed fluid state and that is reminiscent of critical phenomena.

Mindaugas Rackaitis
Bridgestone CRT

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