

Abstract Submitted  
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**Jamming and energy propagation through dense granular matter<sup>1</sup>**

XIAONI FANG, LOU KONDIC, NJIT — In previous work (Phys. Rev. E **79**, 041304 (2009)) we found using discrete element simulations that a reasonable description of energy propagation through dense (jammed) granular system in which volume fraction is kept fixed (CV protocol) can be reached by a linear wave equation with damping. In the present work we consider the systems where we either decrease the volume fraction, or a system under constant applied pressure (CP protocol). In both of the considered scenarios one may distinguish between the jammed and unjammed configurations, defined by the coordination number. We discuss how the nature of energy propagation changes as one goes through the jamming transition.

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