

Abstract Submitted
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Planar graph model of energy landscapes JOSEPH SNIDER,
CLARE YU — Energy landscape models of glasses generally assume that unusual energy distributions are required for slow, glassy dynamics, for example “trap” models with infinitely deep holes. Here, we model energy landscapes with planar graphs where vertices represent configurations and edges represent possible transitions. The vertices are embedded in a two-dimensional plane and assigned energies. The edges are drawn such that only nearby vertices are accessible from any given vertex. In this case, we find two phases: a “glassy” one with sub-exponential relaxation and “normal” one with slightly super-exponential relaxation.

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