

## **Random spring networks vs. soft sphere packings: jamming meets percolation**

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The by now classic studies of jamming of elastic frictionless spheres revealed that sphere packings close to unjamming resist compression much more strongly than they resist shear. The popularity of effective medium theories invited the interpretation that the high compression modulus was "normal" and the shear response was anomalously weak. From the point of view of random networks, however, one can defend the opposite point of view that the compression modulus is anomalously high. I will discuss this issue, starting from results of numerical linear response calculations. In addition, I will discuss a recently obtained exact result for the rigidity threshold in square lattices that are made rigid by randomly adding next-nearest-neighbor bonds.