How to Compute the Tenuous Force Networks in Amorphous Solids

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Compressed amorphous solids are held by a tenuous network of force chains. The computation of the forces between the constituents is considered an "insoluble problem" because the number of unknowns is larger than the number of constraints. I will show how to solve this problem and how to understand the implications of the solution to the statistical physics of jamming and the modes of failure of amorphous solids.