北京大学量子材料科学中心

International Center for Quantum Materials, PKU

Weekly Seminar

Criticality of the jamming tranition at zero temperature and zero shear stress

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Time: 4:00pm, Nov. 19, 2014 (Wednesday)
时间: 2014年11月19日 （周三）下午4:00
Venue: Room 607, Science Building 5
地点: 理科五号楼607会议室

Abstract

Packings of frictionless spheres interacting via repulsions undergo the jamming transition at the so-called point J. The jamming transition corresponds to the sudden formation of rigidity and exhibits unusual scaling relations, which cannot be simply classified into any known type of phase transition. As a typical noncrystalline liquid-solid transition and a simple model related to the long-standing glass transition problem, the jamming transition at point J has attracted a lot of attention in the past decade. In this talk, I will present some of our recent studies suggesting the criticality of point J. By