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Percolation and jamming transitions in particulate systems with and without cohesion[1] LOU KONDIC, LENKA KOVALCINOVA, New Jersey Institute of Technology, ARNAUD GOULLET, Rutgers University — We consider percolation and jamming transitions for particulate systems exposed to compression. For dry granular systems, interacting by repulsive forces in addition to friction and viscous damping, it is found that these transitions are influenced by a number of effects, and in particular by the compression rate. In a quasi-static limit, we find that for the considered type of interaction between the particles, percolation and jamming transitions coincide. For cohesive systems, however, we find that the differences between the considered transitions persist in quasi-static limit.

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