Collision times and stress in gravity driven granular flow

JOHN DROZD, COLIN DENNISTON, University of Western Ontario — We investigate, using simulations, collision times and stress distributions in two and three-dimensional steady-state granular matter in jammed versus diffuse flows. Surprisingly we find little dependence on the dimensionality of space. Grains remain separated with similar power-law distributions of times between collisions and the origin of stress transfer follows a similar mechanism in both cases. We compare our simulations to experimental results.