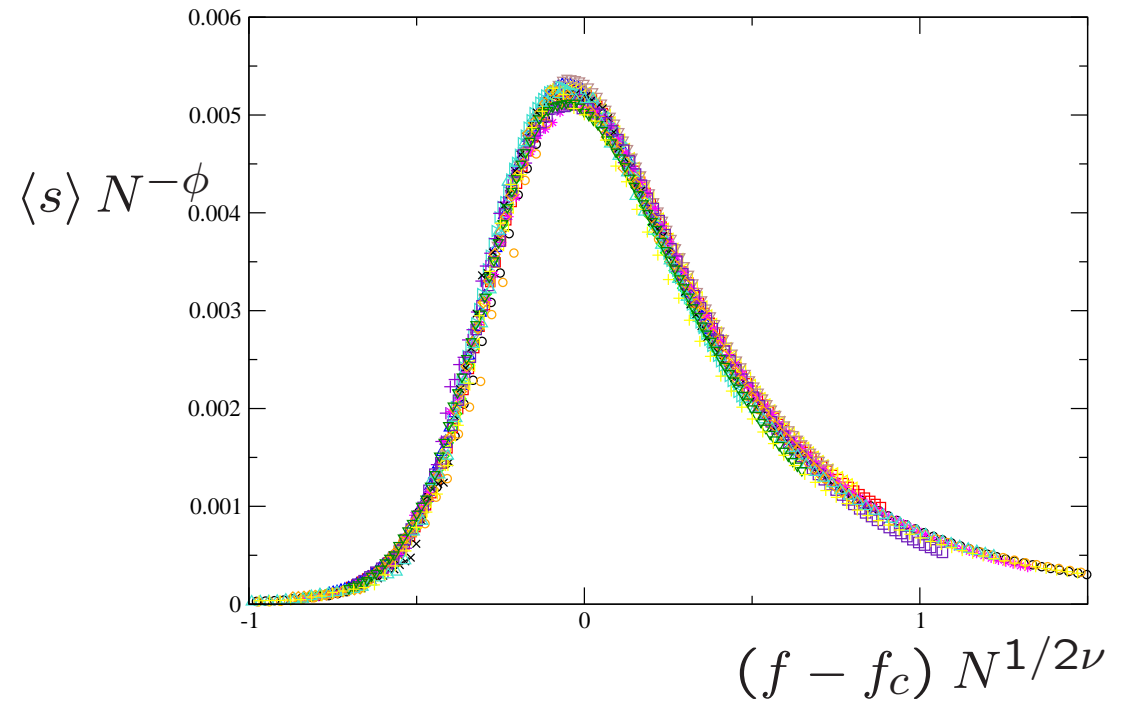
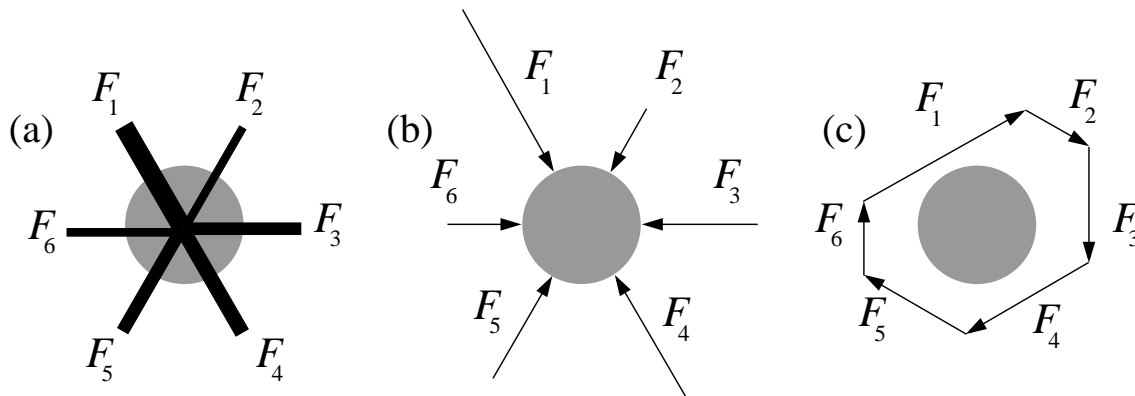


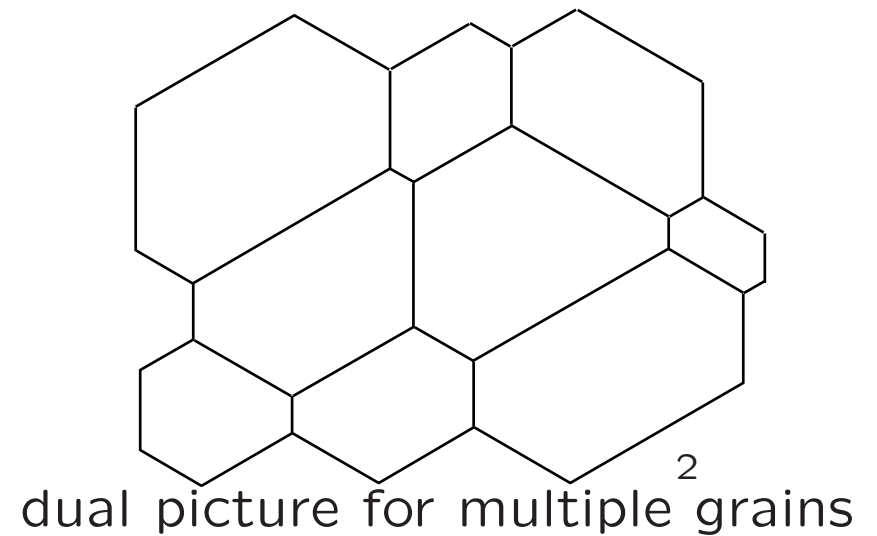
forces in a granular heap



scaling function for force lines



Balanced forces on single grain



dual picture for multiple grains