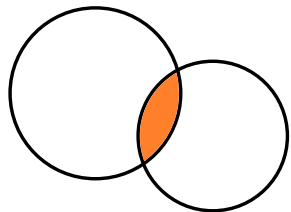
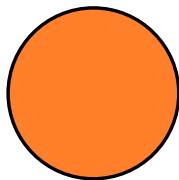
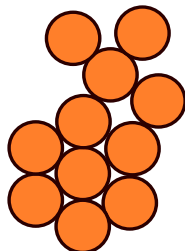
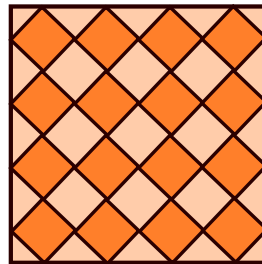
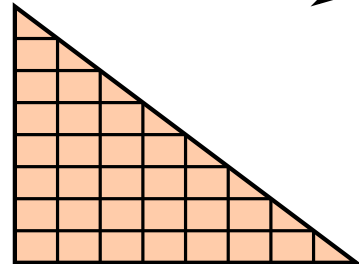


Multi-scale modelling

Contact
 δ Particle
 d Packing
 $g(r)$ Material
RVEStructure
BVP

Composition & Interactions

Statistical
behaviourConstitutive behaviour
(*rheology*)

Particle scale simulation, DEM

Continuum simulation

RVE: Representative Volume Element

BVP: Boundary Value Problem