$n_p=500, T_{adim}=1, \rho=.8$
BD --> $t_{eq}=15000, t_{ens}=10, t_{run}=5000, \Delta t=.001$
MD --> $t_{eq}=1000, t_{scal}=50, t_{run}=1000, \Delta t=.005$

Radial distribution function ($g(r_{ij})$)

pair realtive distance (r_{ij})

BD
$r_{ij_{max}}^{BD}=1.062$
MD
$r_{ij_{max}}^{MD}=1.118$