MeMC: A python,cpp package for monte carlo simulation of spherical membranes

13 August 2017

Figures

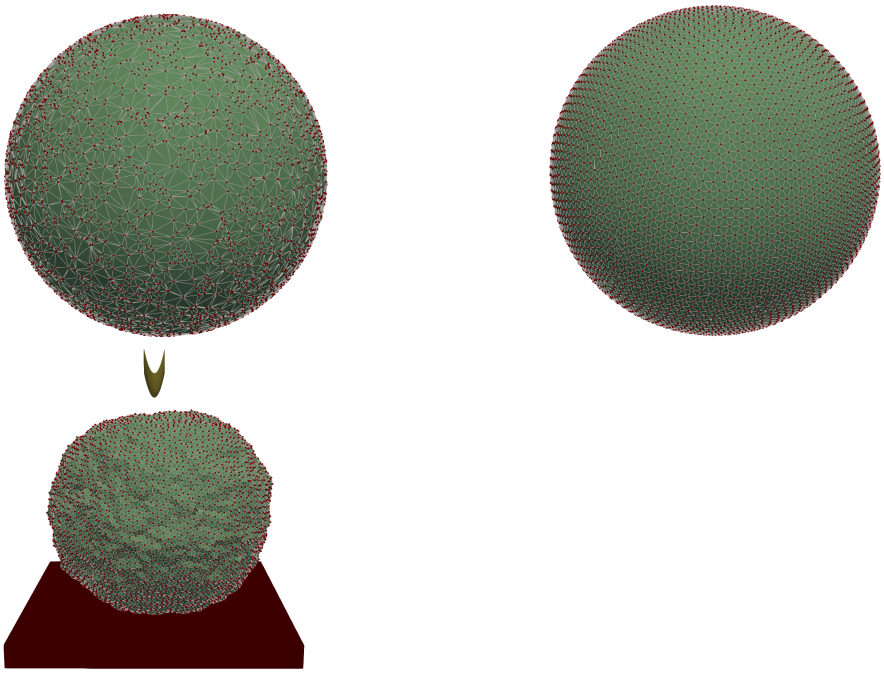

Figure 1: We perform monte-carlo simulation on the surface of sphere to generate equidistant points. **(A)** Random points on sphere ($Np = 5120$, where Np is number of points on the surface. **(B)** Points on the sphere after 60000 iteration of surface monte carlo simulation. We use Spherical-Voronoi to triangulate the mesh.

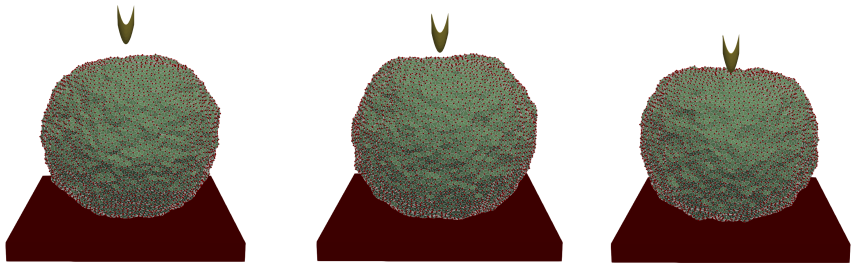

Figure 2: Here we illustrate the shape of spherical membrane, if we push it from the top using an AFM tip. The membrane is stuck to the bottom by using attractive part of LJ potential. **(A)** $t_z = 1.05R$, where t_z is the tip position and R is radius of the sphere. **(B)** $t_z = 0.9R$ and **(C)** $t_z = 0.75R$