The code of continuum membrane model is programmed in C++ with Armadillo library and parallelization OpenMP.

The main code is ‘continuummodel\_maincode.cpp’, and ‘funcitons\_file1.cpp’ and ‘functions\_file2.cpp’ list all the functions this membrane utilize. Specifically, the functions for setting up triangular mesh are listed ‘functions\_file2.cpp’, and the functions for calculating the system energy and the vertex force are defined in ‘functions\_file1.cpp’.

To compile the file:

*g++ continuummodel\_maincode.cpp -larmadillo -fopenmp -o out*

Then to run the code:

*./out*

If you use/modify our code, please be kind and cite us:

1. Continuum membrane implementation:

Fu, Y., Yogurtcu, O.N., Kothari, R., Thorkelsdottir, G., Sodt, A.J. & Johnson, M.E.\* An implicit lipid model for efficient reaction-diffusion simulations of protein binding to surfaces of arbitrary topology. J Chem Phys. 151, 124115 (2019)

1. Membrane energies and insertion:

Fu, Y., Zeno, W., Stachowiak, J. & Johnson, M.E.\* A continuum membrane model predicts curvature sensing by helix insertion. Submitted (2021)