

Notebook	Function	Comments
Spherical-swelling-notebook.wl	Notebook that solves the spherical conservation law numerically. The methods are outlined in the appendix of the report;	The notebook can run on a cluster. The data is exported and can be used for analysis by different other notebooks. The parameters are not exported so one must keep track of the parameters. It can be done by storing the notebook and data in the same folder.
Reading-file.nb	Generate the characteristic plots for the spherical swelling dynamics	The notebook needs to data from the Spherical-swelling-notebook.wl. Place the data in the same folder before running the reading-file.nb
Comparison-mu.nb	Generate the effective azimuthal stress for the chemical potential of 0 and a chemical potential of -2000. Can be adjusted to compare other environments as well, as long as these datasets are generated in advance	The notebook must be placed in a folder with two folders; one containing the 0 chemical potential data and the other containing the -2000 chemical potential data. These files in these folders must be imported into the notebook. Data can be found in data storage
Comparison-N.nb	Generate the effective radial stress for two different grid sizes. Moreover, the $a(t)$ dynamics are compared and the position of the effective radial stress at $r=a$	The notebook must be placed in a folder with two folders; one containing the 5 gridsize set and the other containing 15 gridsize set. These files in these folders must be imported into the notebook. Data can be found in data storage