Notebook	Function	Comments
discrete3Dmodel-meanB.nb	notebook containing the general procedure for minimizing the total spring energy under the volume constraint. Visualization of the side-view and front-view of the cylinder;	
discrete3Dmodel-meanB-Kb1.nb	notebook containing a loop over the spring constant Kc for a constant Kb=1;	
discrete3Dmodel-meanB-Kb10.nb	notebook containing a loop over the spring constant Kc for a constant Kb=10;	
continuousmodel-solutionODE.nb	notebook that numerically solves the dimensionless differential equation for varying \delta, and \kappa_b.	
discrete3Dmodel-meanB-experimental3kDa.nb	notebook that can be used to generate the stretching in the different directions for the experimental volume curve. By setting Ka, Kb, Kc before and after the transition, data can be generated that can be compared to experiments with 'Analysis-experimental3kDa-model.nb'	Notebook can run on the cluster when converting it to a .wl notebook with cells as 'Initialization cells'. Experimental data must be placed in the same folder during a run. Important (!): keep the notebooks with the set parameters in a single folder. The notebook does not export all parameters, so keep track of your data and corresponding parameters
Analysis-experimental3kDa-model.nb	Notebook that can plot the experimental data and the numerical results before and after the transition. The graphs are based on manual set parameters.	All data from the notebook 'discrete3Dmodel-meanB-experimental3kDa.nb' and the experimental data must be placed in the same folder as this notebook before running