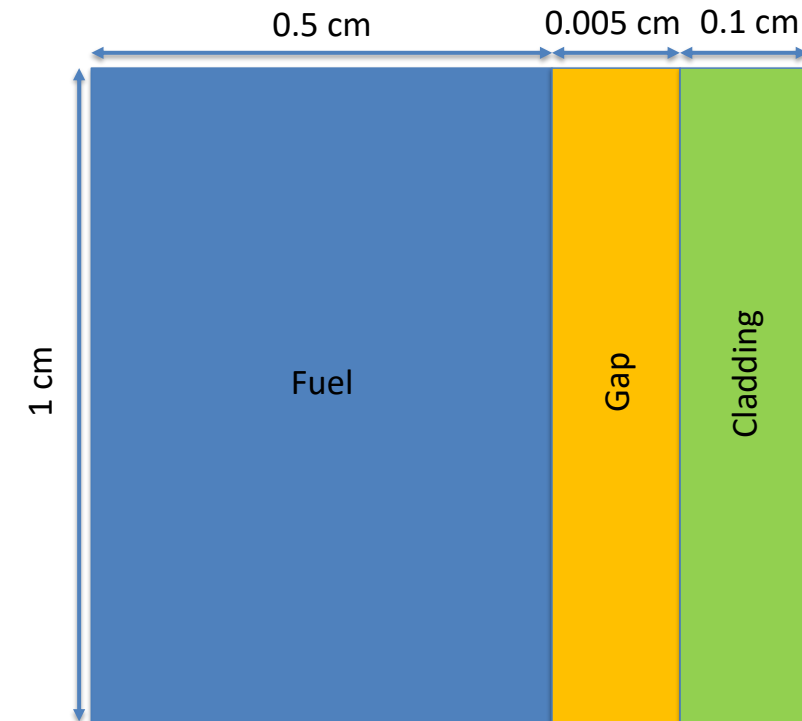


# MOOSE Project Part 3

- Same setup as part 1
- Include effects of thermal expansion, densification, and FP-induced swelling
- Simulate until gap closure, but do not need to handle contact
- LHR is uniform, constant
- T and burnup dependent kth
- Make appropriate assumptions where needed
- Determine the displacements and stress state in the fuel as a function of time
- Perform appropriate analyses: Thermal stresses cracks in fuel? When do we have gap closure? Etc.



## MOOSE Part 3 Writeup

- Will upload input and output files to Moodle
- Write up with deliverables from Part 1, 2, 3, choice of materials, mesh, details therein, etc.
- Expected to have fixed any issues with Part 1/2
- Part 3 writeup max of 12 pages
- Due April 24 at 11:59pm