

Homework 8, due: 04/07

MATH 9830, Spring 2015

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0. Before you start:

- PLEASE make sure you send me the code via email (you do not need to print any code).
- Print (or email a pdf) with your output (pictures, text), explanations, and drawings.

1. step-40

- Work through step-40 and make sure you understand it.
- Add output to show the number of locally owned cells and locally owned dofs on each processor. Report the output when running with a) 3 ranks and b) 32 ranks (2*16 cores) on palmetto.
- Create pictures of the solution (run with 3 ranks) where the mesh, the cell distribution between processes, and the solution (using elevate) is visualized. Pick a refinement cycle that looks good (maybe 3 or 4).