Out: Dec 5, 2021 Due: Dec. 17, 2021

## Due: 8:30 a.m. December 17, Tuesday, 2021 (No late homework accepted)

1. [Extra 50 points] Using the ABAQUS tutorial and your notes from Lecture 15, solve a 3D solid mechanics problem of your choice using plasticity theory. State the problem clearly including hypotheses and goals. Specify your boundary conditions clearly and report the values of your von Mises stress in a contour plot every 50 frames (make sure you have at least 200 frames in your result output). Assume isotropic hardening (for the hardening curve, you can assume perfect plasticity, or you can get experimental data from the literature. Remember to cite the source):

Feel free to stop by during office hours if you have questions on the software or on how to connect remotely to the server.