

Homework 7. *Mohr-Coulomb theory of faulting*

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- 1) Use your solutions for the state of stress within the self-gravitating sphere to predict where failure is likely to occur. Use the sphere radius of 6730 km, and constant density of 3×10^3 kg/m³. Assume the coefficient of friction $\mu = 0.6$.

- 2) Draw a picture illustrating (i) the depth extent of the faulted area, (ii) the predicted fault orientation, and (iii) fault spacing. Estimate the magnitude of the average fault slip required to relieve the elastic strain. Discuss possible inaccuracies/inadequacies embedded in your prediction.