SHAWN MCADAM, University of Saskatchewan
Symmetry and numerical analysis of nonlinear Love wave model

Love waves are horizontally polarized transverse waves (SH waves) that form from the constructive interference of SH waves reflecting off the surface of the Earth. In this talk, I motivate a nonlinear model of SH waves and apply it to numerically study the qualitative behaviour of Love waves near the focus of an earthquake. I then compare these numerical solutions to solutions (and approximate solutions) obtained via symmetry methods.