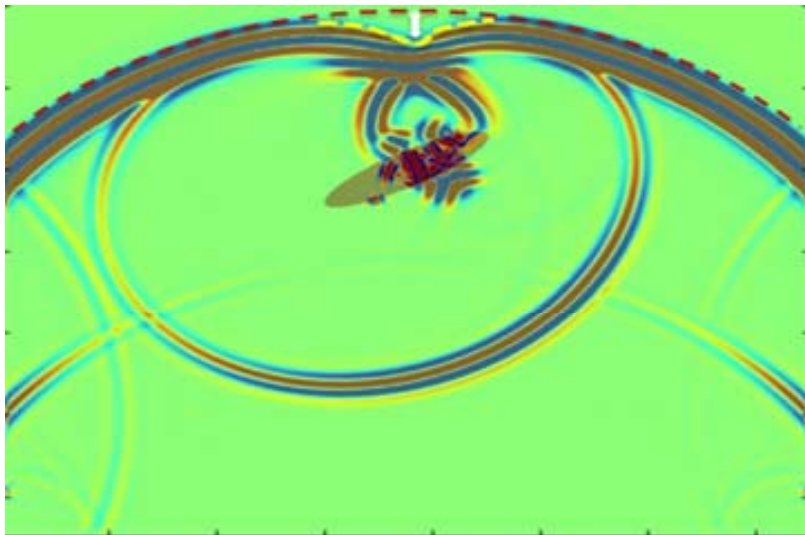


# PHY2605S: Advanced Exploration Seismology

- Seismic exploration methods illuminate the subsurface using elastic waves. The signals of interests arise from reflection, refraction and scattering of those waves at lithologic and structural boundaries, where abrupt changes in elastic rock properties occur. A sound geological interpretation of seismic signals requires a complete understanding of the pertinent physical rock properties (e.g., compression wave velocity, shear wave velocity, density, anisotropy, absorption) and how they relate to specific exploration targets, as well as how they are influenced by stress, temperature, porosity and pore fluid conditions



Elastic Wave Scattering from an Orebody

**Organizational Meeting:  
Tuesday, January 6<sup>th</sup>, 2015  
4PM, MP 505  
Lecture and Lab Times TBD**

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