Course Description

Carbon Capture and Storage (CCS) is widely considered as a key technology to combat climate change. This course presents a comprehensive review how seismic imaging can be used to monitor underground (geologic) storage of carbon dioxide. Topics covered include basics of seismic data acquisition, wave propagation, and imaging, empirical relations between seismic and fluid-flow properties, two-phase flow equations describing CO2 plumes, and the challenges of designing a seismic monitoring system for geologic CO2 storage.

Today's Outline

- Introduction to the course
  - Class logistics, requirements and policies
  - Intro to your instructor
- Why do we study this class