

Effects of surface geology on the ground motion

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Outline

- What I would like to show:
 - i. Uncertainties of ground motion prediction
 - ii. Why do we have site effects? An overview
 - iii. What field and laboratory data say about linear and nonlinear wave propagation?
 - iv. Borehole seismology: advantages and problems
 - v. Monitoring site properties using strong motion data
- NOAH (NOOnline Anelastic and Hysteretic code) to simulate wave propagation in 1D linear and nonlinear media:
<https://dl.ipgp.fr/f54afw4>
- If time allows I have examples about site characterization and broadband strong motion prediction (0-50 Hz) using noise techniques