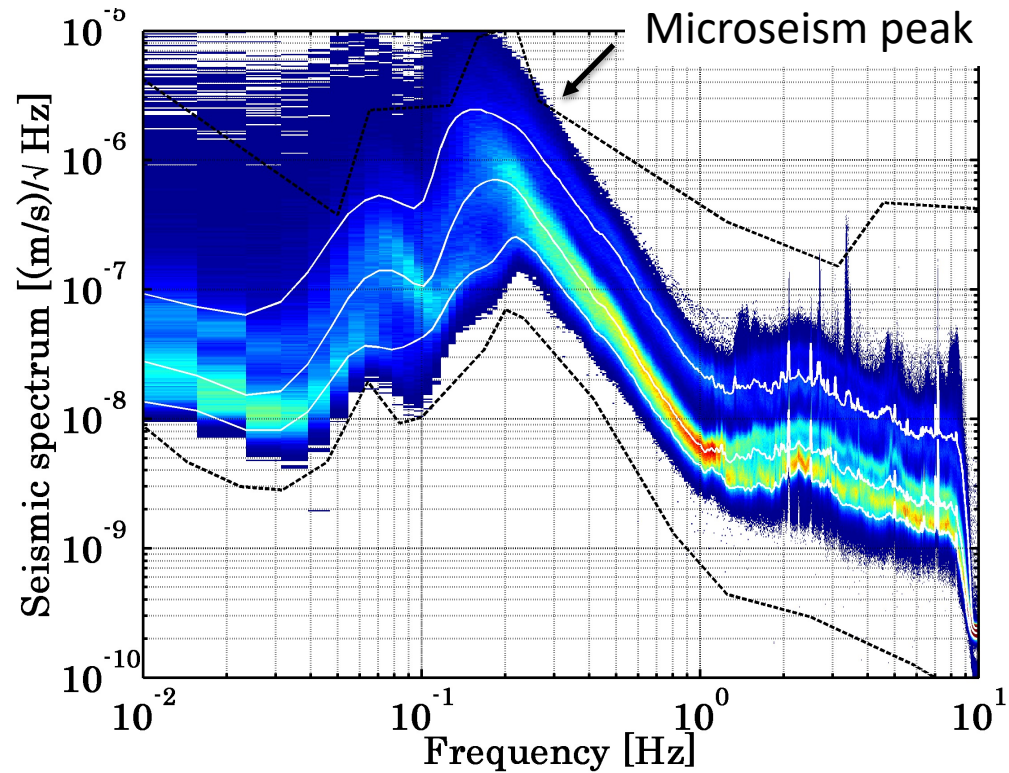


13. Passive Seismic and Interferometry

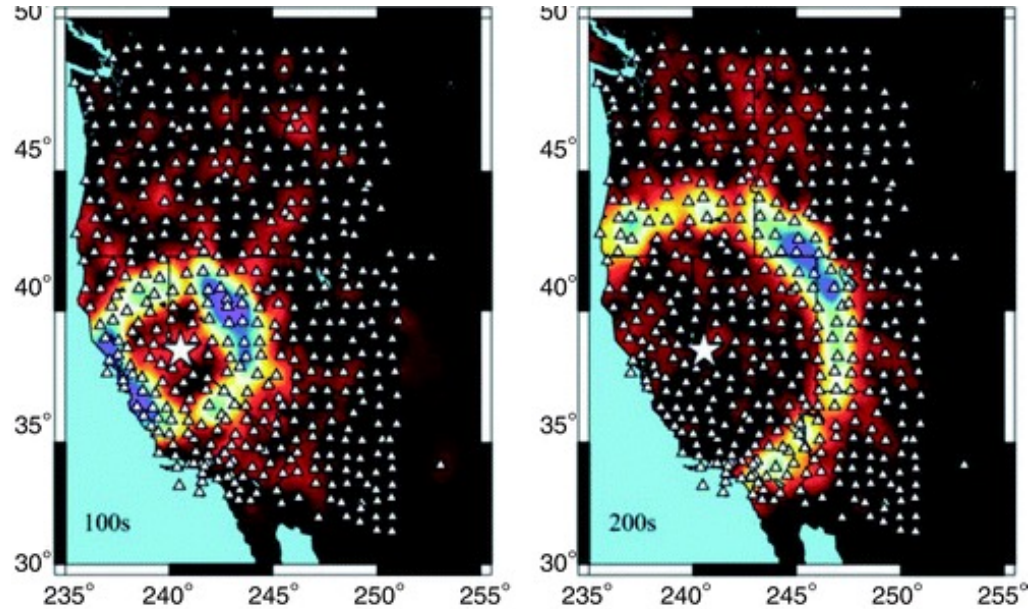
M. Ravasi

ERSE 210 Seismology

Earth's Noise



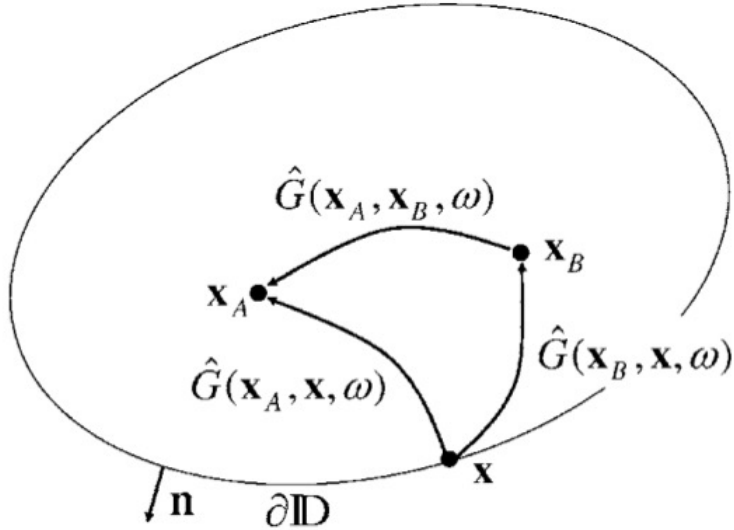
Seismic Interferometry



Lin et al., 2009

$$n_{S1}(t) \otimes n_{S2}(t) = G(S1, S2, t)$$

Cross-correlation interferometric theory



$$G^*(x_B, x_A, \omega) + G(x_B, x_A, \omega) =$$

$$\oint_{\partial D} \frac{-1}{j\omega\rho(x)} \left(G^*(x, x_A, \omega) \partial_i G(x, x_B, \omega) - \partial_i G^*(x, x_A, \omega) G(x, x_B, \omega) \right) n_i dx$$