Lecture 33

Perturbation theory: perturbations for self-adjoint eigenproblems, with application to computing losses in dissipative (slightly non-Hermitian) wave problems. Connection to Hellman-Feynman theorm. Showed that group velocity dω/dk can be evaluated via Hellman-Feynman, and yields a ratio of energy flux to energy density: an "energy velocity".

18.303 Linear Partial Differential Equations: Analysis and Numerics

Fall 2014