Physics H190
Spring 2013
Homework 7
Nothing to turn in

Reading Assignment: Lecture notes from Wednesday, March 13. I have been trying for many years to find a simple way of explaining the normal mode transformation for the Klein-Gordon equation (and the electromagnetic field, which not much more complicated), and I think Wednesday's lecture is the best I've been able to do. Since I spent so much time writing it up I don't have any homework problems ready, so I only ask you to read the notes and make sure you understand the normal mode transformation at the classical level, and the manner in which the Hamiltonian for the field (which is the energy of the field) becomes a sum of harmonic oscillators.

We'll discuss the quantization of the field in greater detail next Wednesday. Then I think the next topic will be the Casimir effect.