

Stuff for Tuesday, March 27, 2012

- If you didn't get your picture taken yesterday, see me up front.
- We meet tomorrow in Smith 1094 for the studio session (Q1/Q2). Come at 2:30pm if you are able to, otherwise 3:30pm.
- New handout: Dimensional analysis. (Also 3 old handouts.)
- Tentative evening midterm date: Tuesday, May 1. Conflicts?
- Recap of important Q1 concepts:
 - linear wave equation \rightarrow superposition
 - reflection at fixed end \rightarrow inverted; at free end \rightarrow upright
 - Fourier theorem: decompose general wave function *uniquely* into sum of sinusoidal waves (normal modes)
 - resonance: energy absorbed at normal-mode frequencies
- Reference:

$$\frac{1}{v^2} \frac{\partial^2 f}{\partial t^2} = \frac{\partial^2 f}{\partial x^2}$$

$$\sin(A \pm B) = \sin A \cos B \pm \cos A \sin B$$