

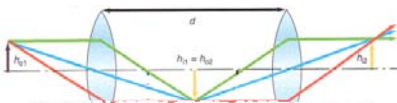
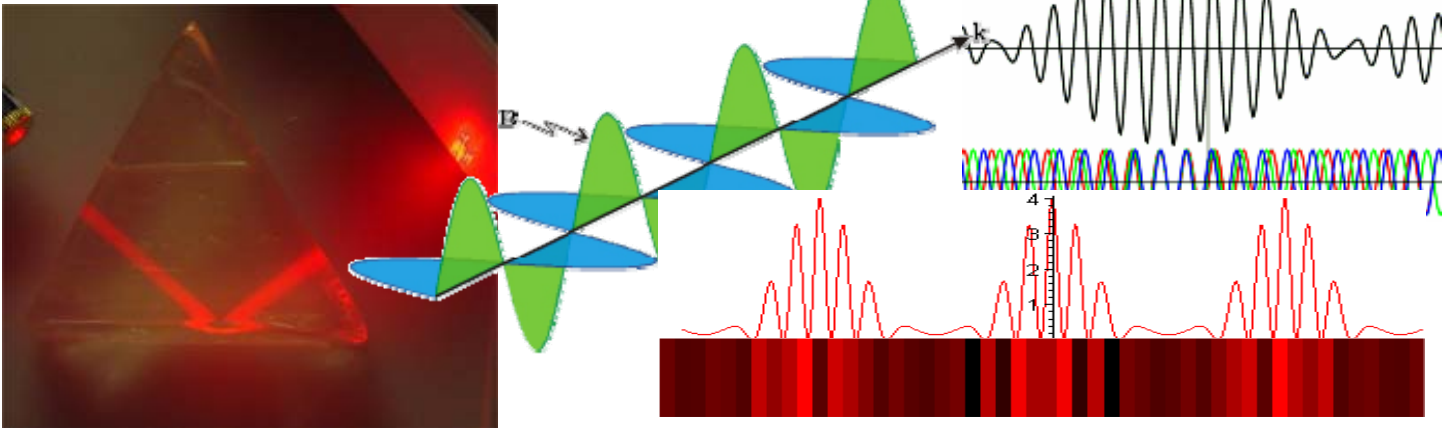
PHY 445 Optics - Fall 2011

... The physics of light!

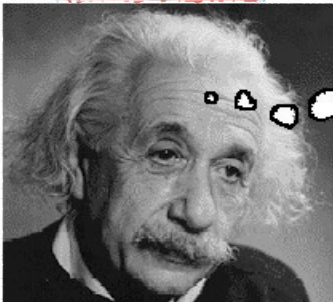
Dr. R. Herman

Prerequisite: PHY 202 and MAT 261.

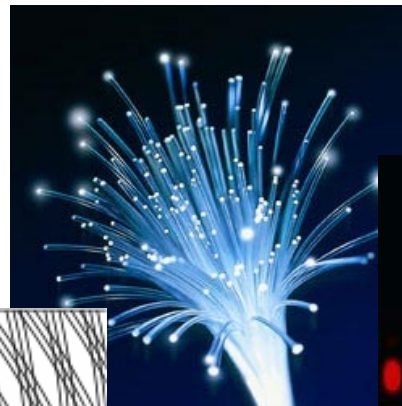
This optics course covers: Physical and geometrical optics. Huygen's principles, electromagnetic theory of light.



$$E(x, y, z = d) = -\frac{i}{\lambda} \iint_{\text{aperture}} E(x', y', z = 0) \frac{e^{ikR}}{R} \left[\frac{1 + \cos(\mathbf{r}, \hat{\mathbf{z}})}{2} \right] dx' dy'$$



ya know ..
.. I think I see
the Light!



$$\begin{bmatrix} A' & B' \\ C' & D' \end{bmatrix} = \begin{bmatrix} 1 & d_i \\ 0 & 1 \end{bmatrix} \begin{bmatrix} A & B \\ C & D \end{bmatrix} \begin{bmatrix} 1 & d_o \\ 0 & 1 \end{bmatrix}$$

