Thumbnail Summary of Waves

Wave relationships:

Wavelength, frequency, speed, amplitude, intensity

$v = f\lambda$, $I = A^2$, *etc*.

2-slit interference:

Phase difference depends on source phases and path lengths.

$A_{tot} = 2A_1\cos(\phi/2)$, *etc*.

N-slit interference:

Diffraction gratings, Rayleigh's criterion.

1-slit diffraction:

Circular apertures, Rayleigh's criterion, limits on optics.

Interferometers.

We'll use many of these results when we study quantum mechanics.