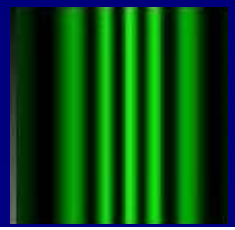
Double-slit interference

Light (wavelength λ) is incident on a two-slit (two narrow, rectangular openings) apparatus:

If either one of the slits is closed, a spread-out image of the open slit will appear on the screen. (The image is spread due to diffraction. We will discuss diffraction in more detail later.)

If both slits are open, we see interference "fringes" (light and dark bands), corresponding to constructive and destructive interference of the wave passing through the two slits.



Note: In the laser demo, there is little vertical spread, because the laser spot is small in that direction.