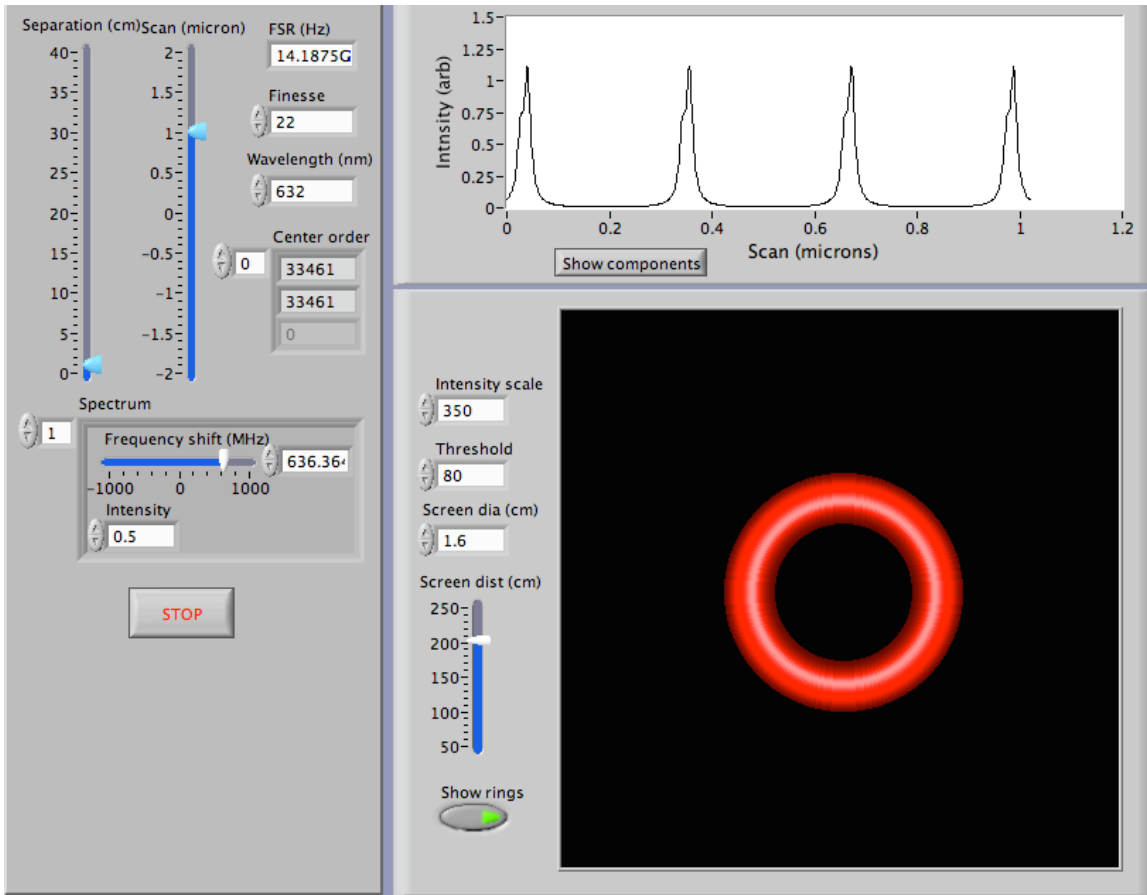


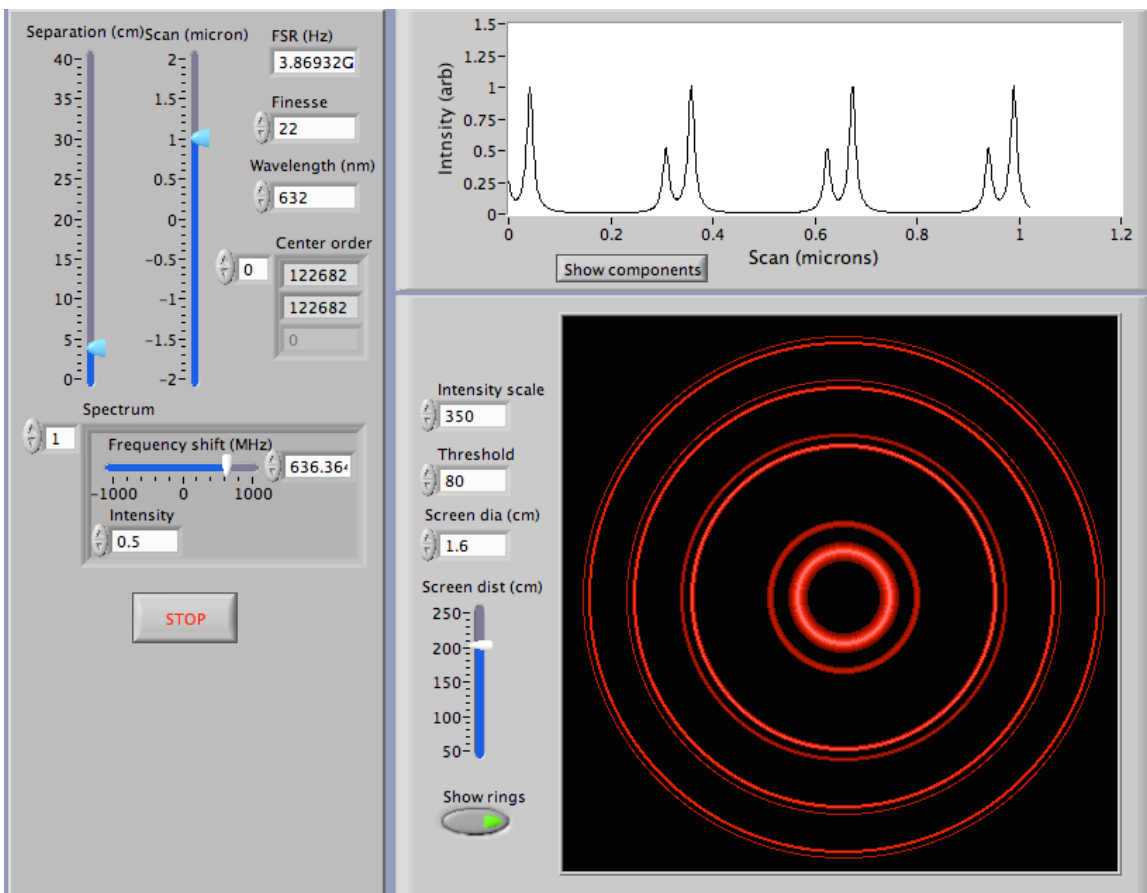
# LAB VIEW FABRY PEROT SIMULATION by Dr. David Pengra



This program is available on the Mac in the lab.

~1 cm spacing

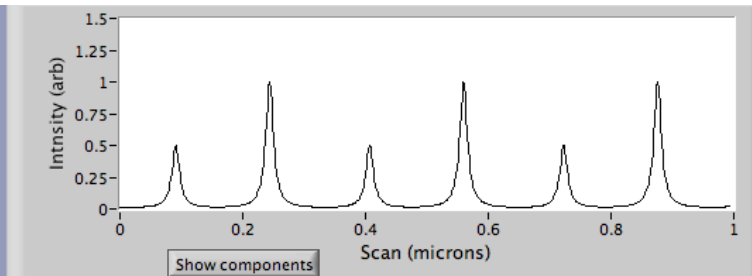
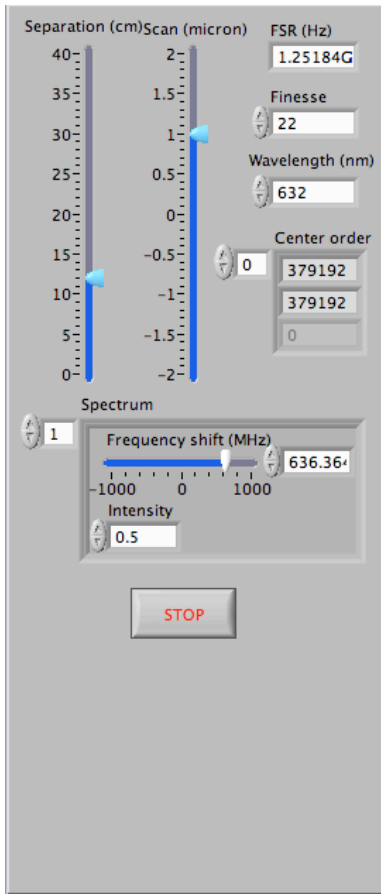
14.2 GHz free spectral range



~4 cm spacing

3.9 GHz free spectral range

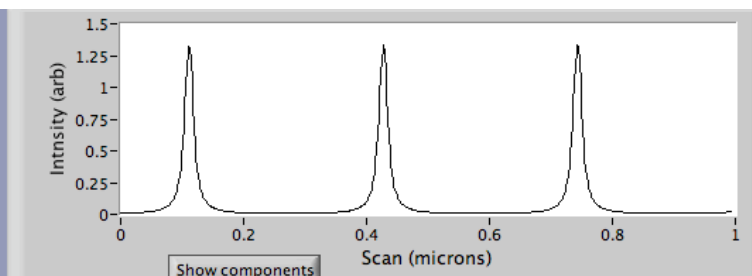
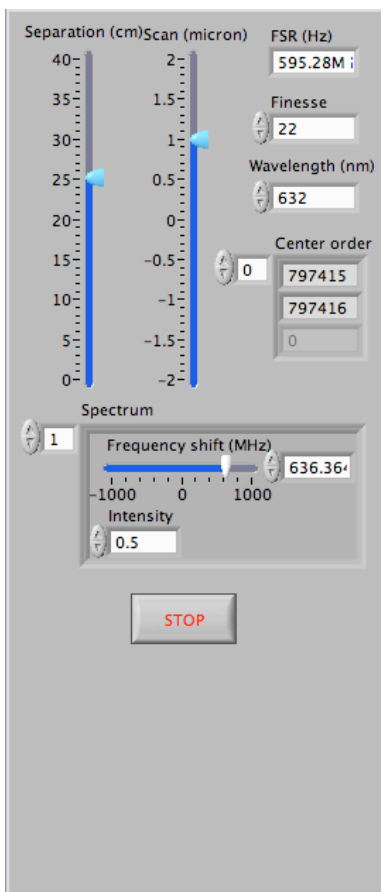
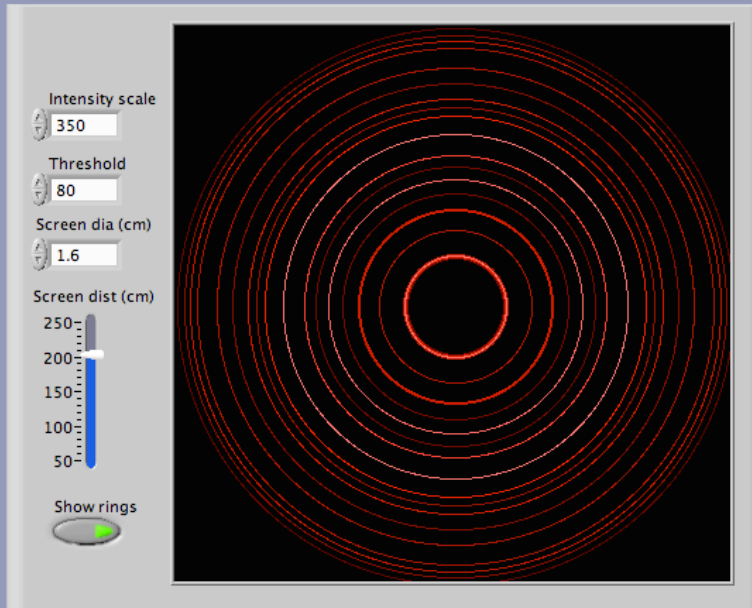
Finesse 22 permits separation of peaks that are .64 GHz apart



~12 cm spacing

1.25 GHz free spectral range

Note that it is no longer possible to know if the less intense second peak is above or below the more intense peak



~25 cm spacing

Free spectral range in wavelength for a given spacing is defined as the wavelength difference between two peaks of  $\lambda_1$  and  $\lambda_2$  such that  $(m+1)\lambda_1 = m\lambda_2$ . Note that  $m=797415$  in this example, which gives total path length for one pass of 50.4 cm.

