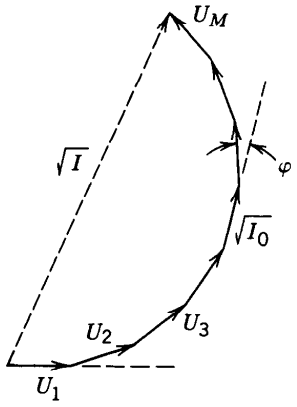
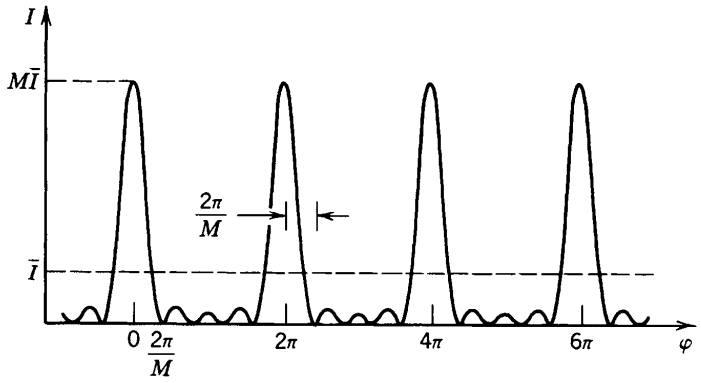
Experimental Physics 3 - Em-Waves,Optics, Quantum mechanics

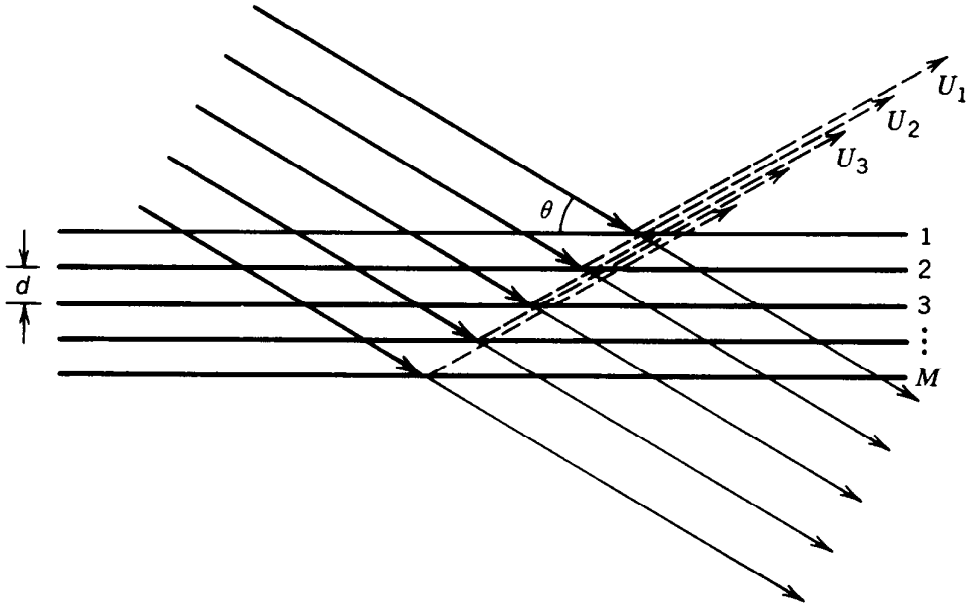
Lecture 10

Prof. Dr. Frank Cichos
WS 2022/23

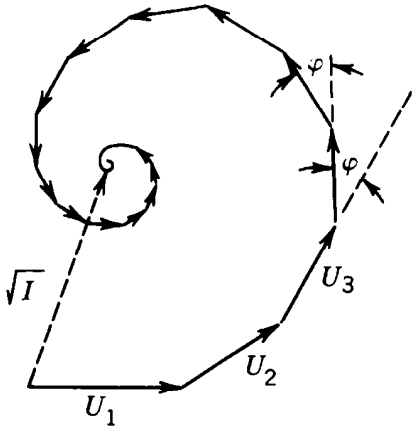
Multiple Wave Interference - Constant Intensity

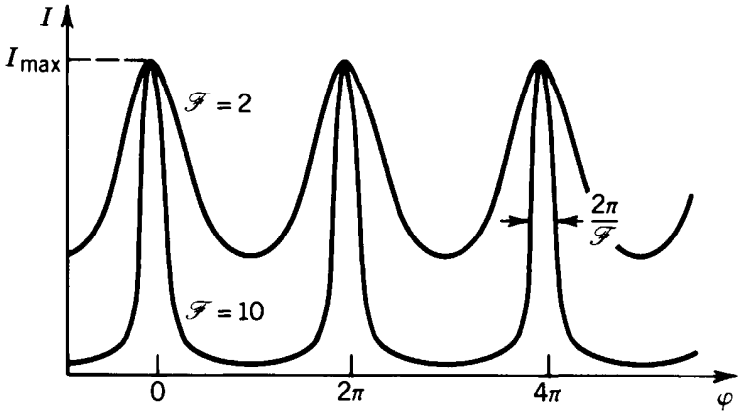


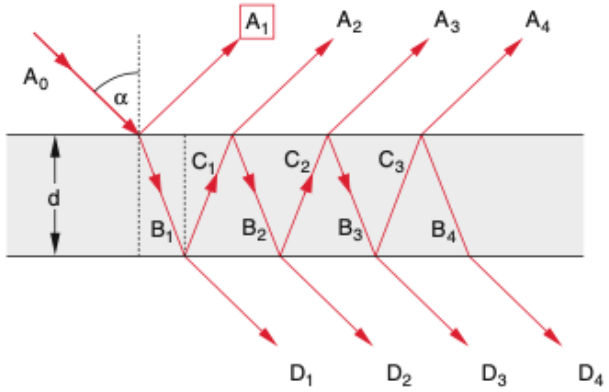




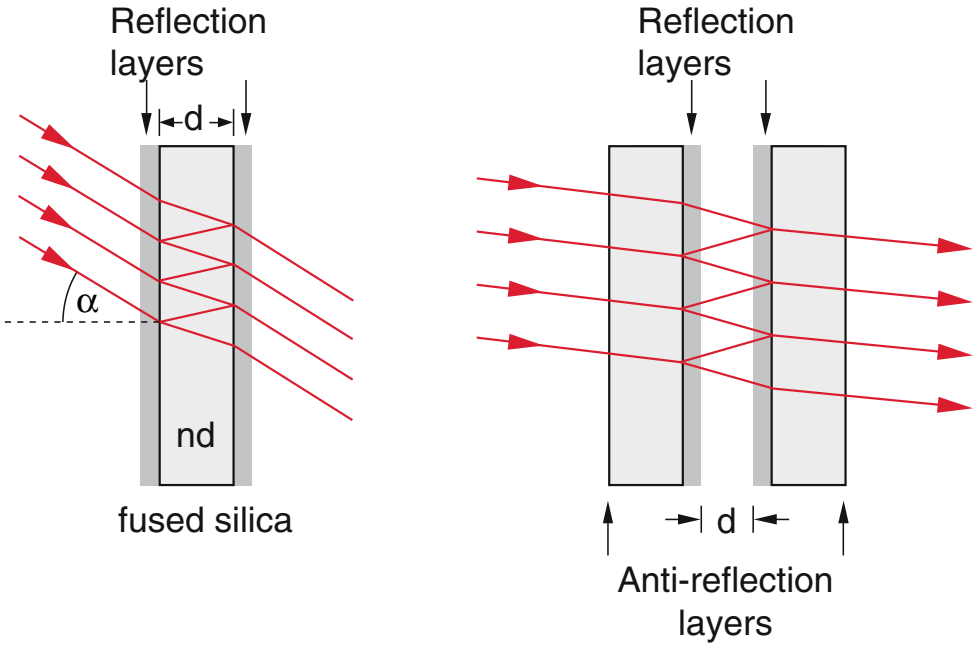
Multiple Wave Interference - Decaying Intensity

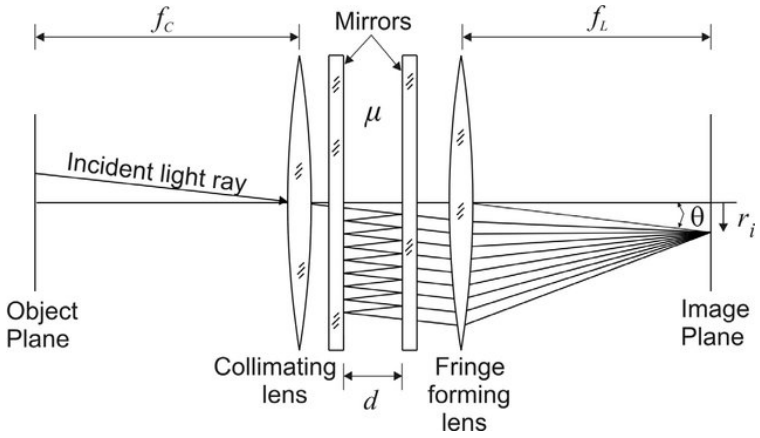




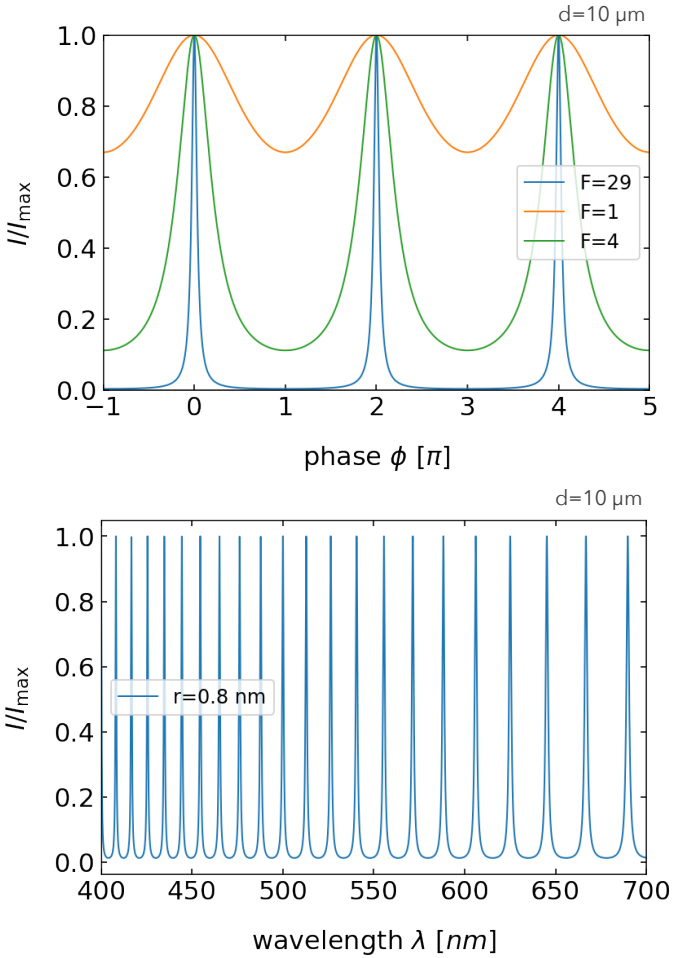


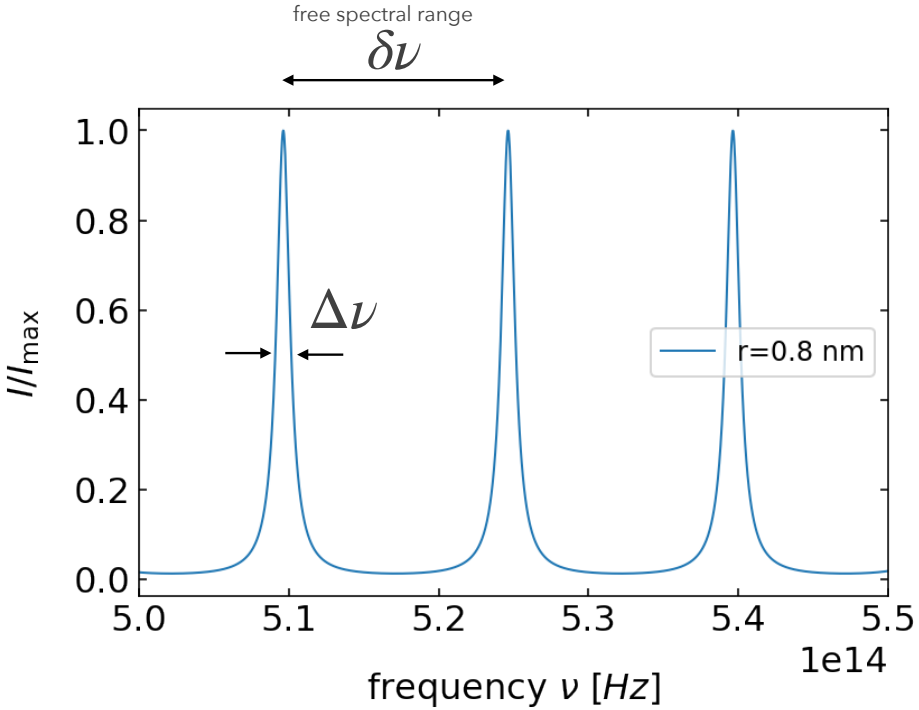
Fabry Perot Interferometer





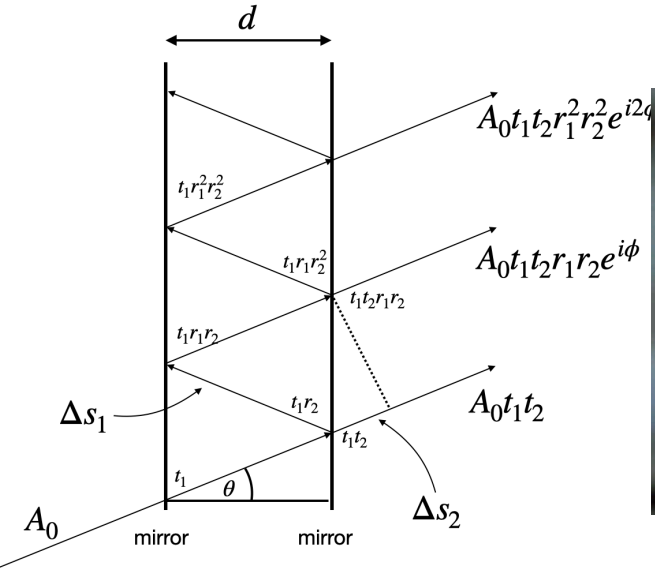
Fabry Perot Interferometer

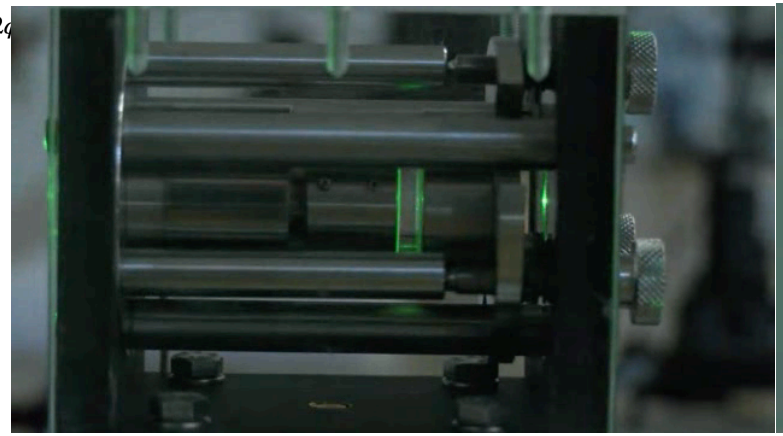


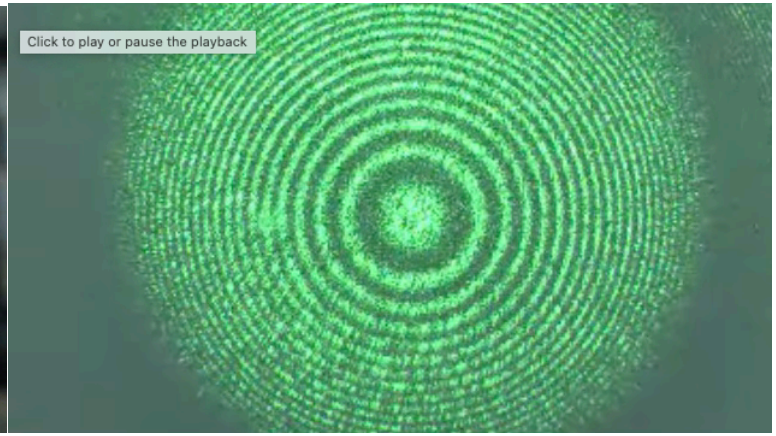


$$\mathcal{F} = \frac{\delta\nu}{\Delta\nu}$$

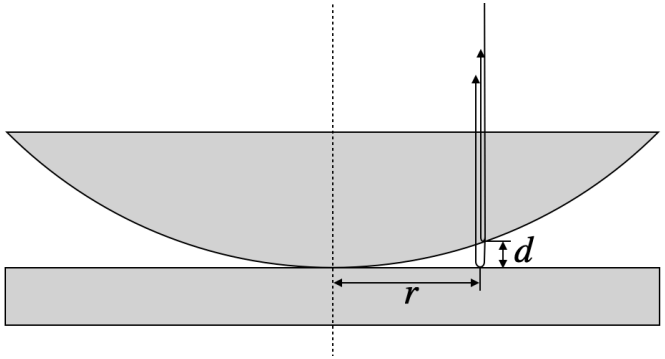
Fabry Perot Interferometer

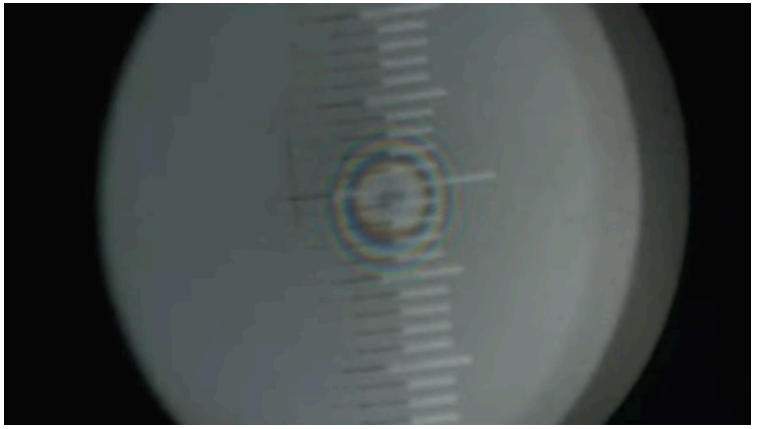






Newton Rings

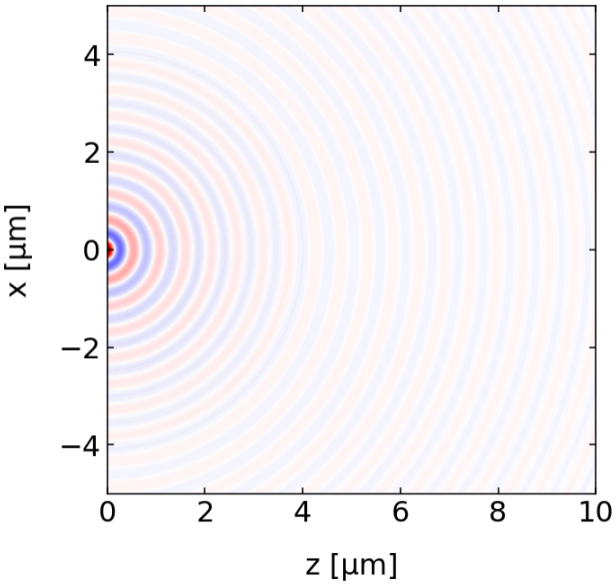




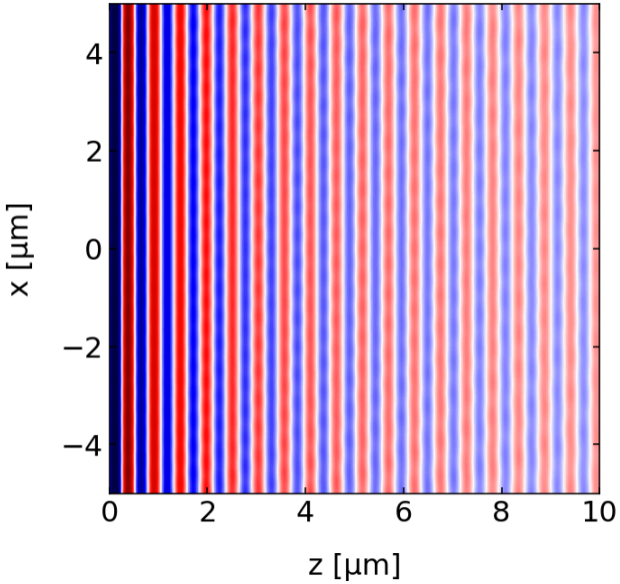
2.3 Diffraction

2.3.1 Huygens Principle

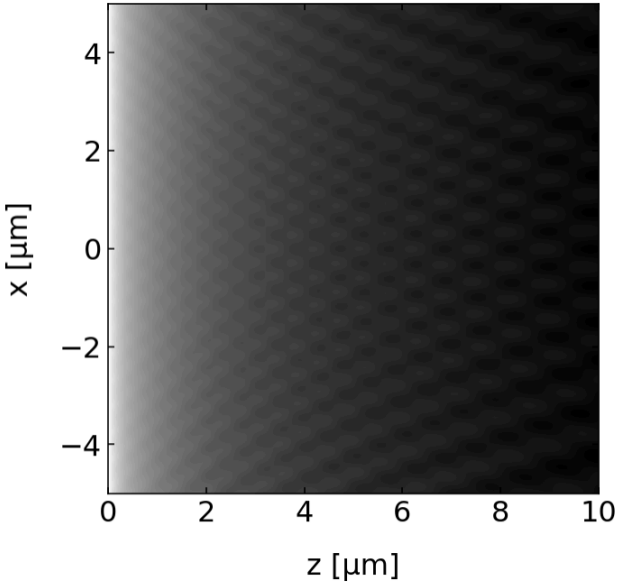
single spherical wave



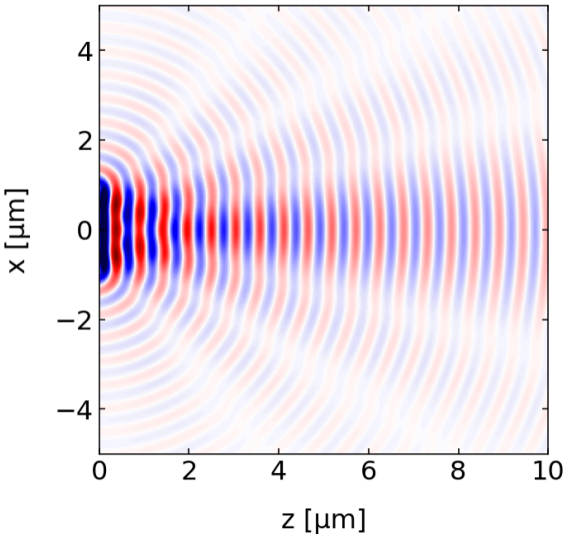
500 spherical waves

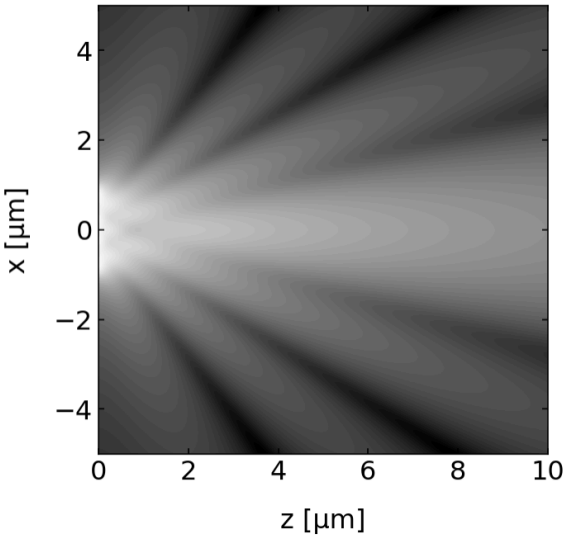


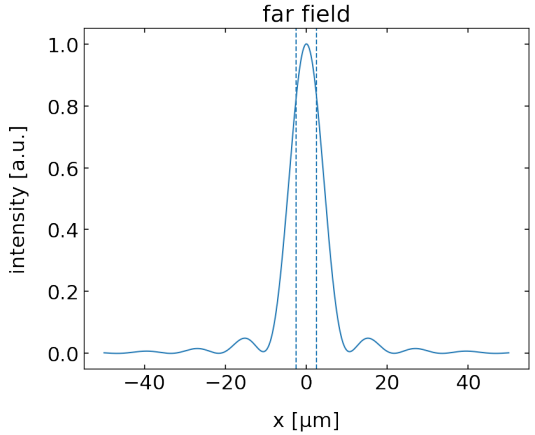
Intensity

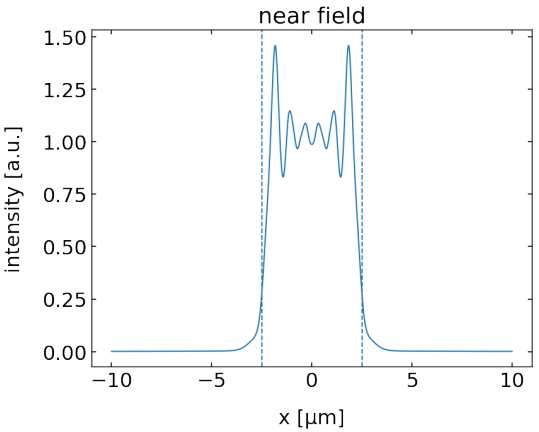


2.3.2 Single Slit

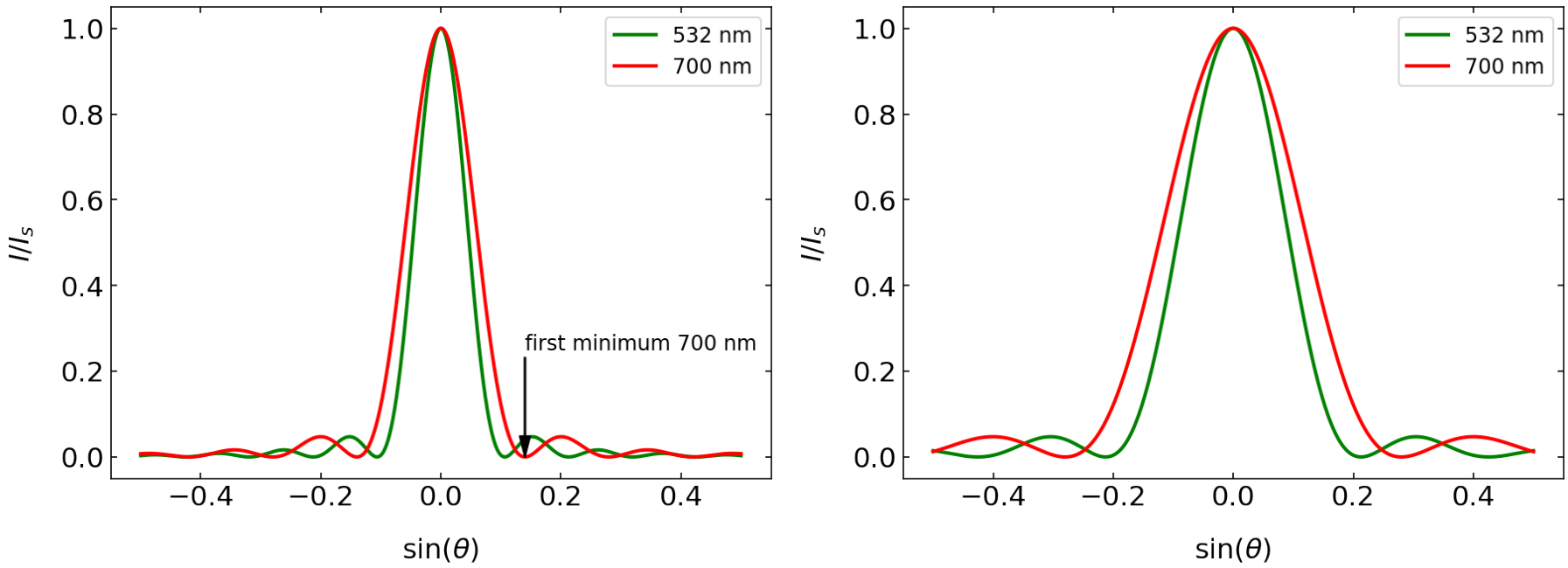




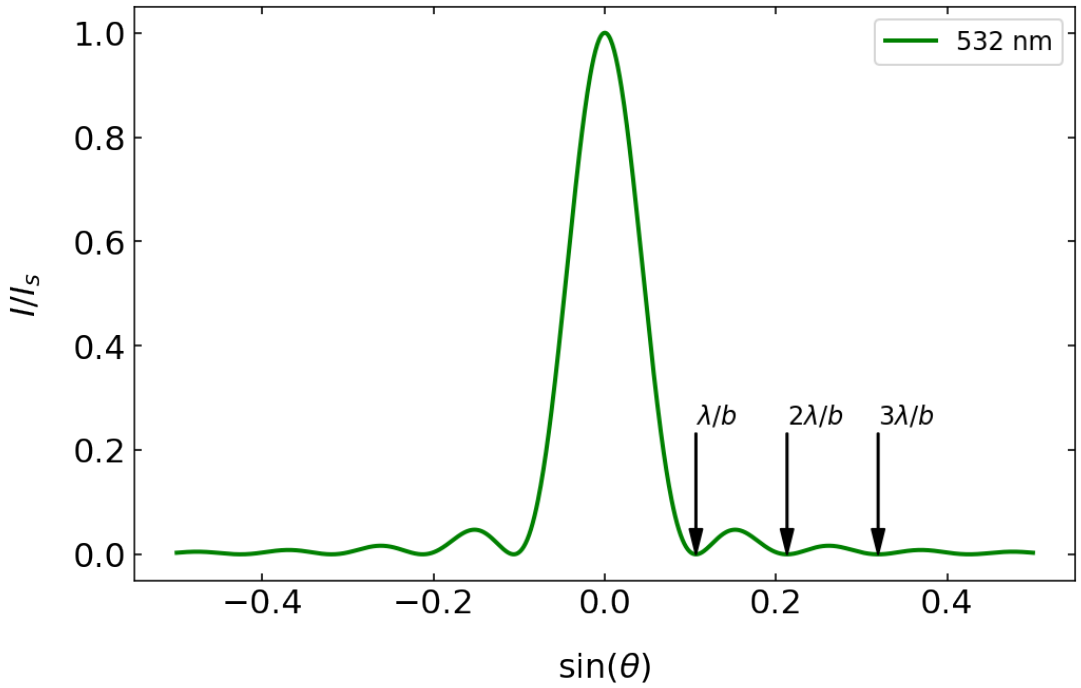




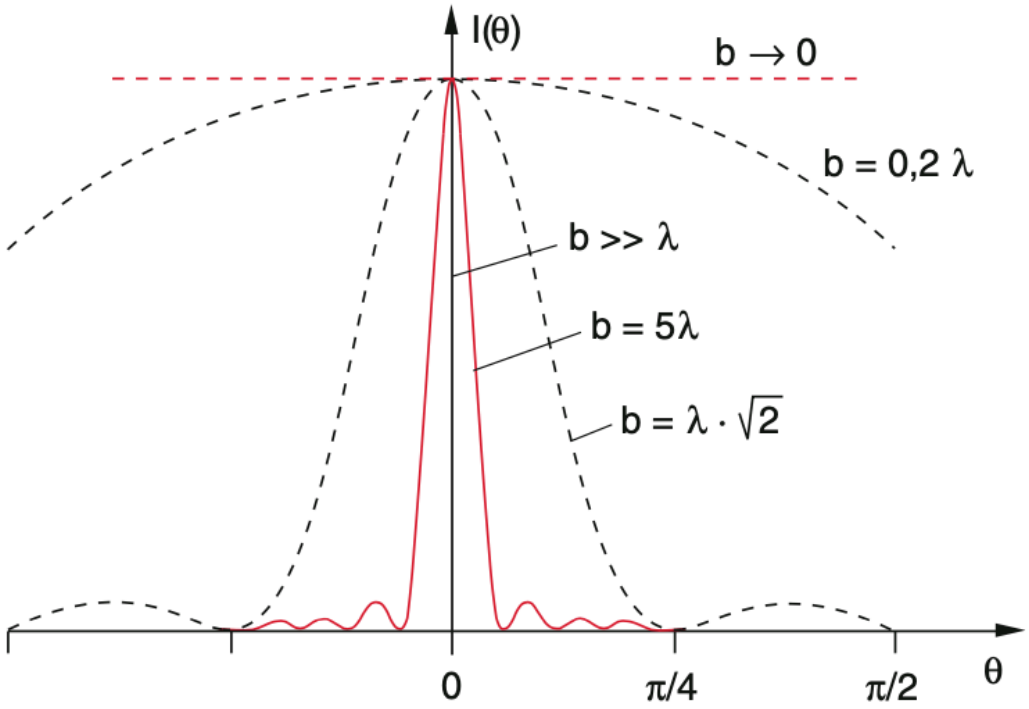
Single Slit Diffraction



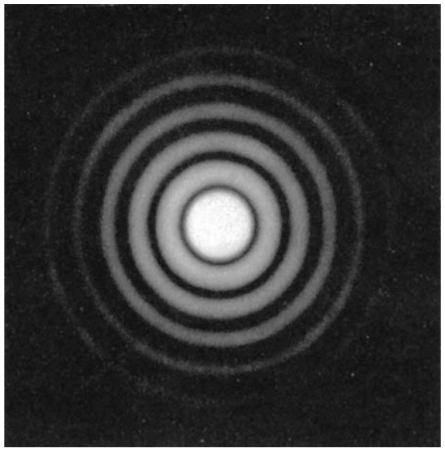
Single Slit Diffraction



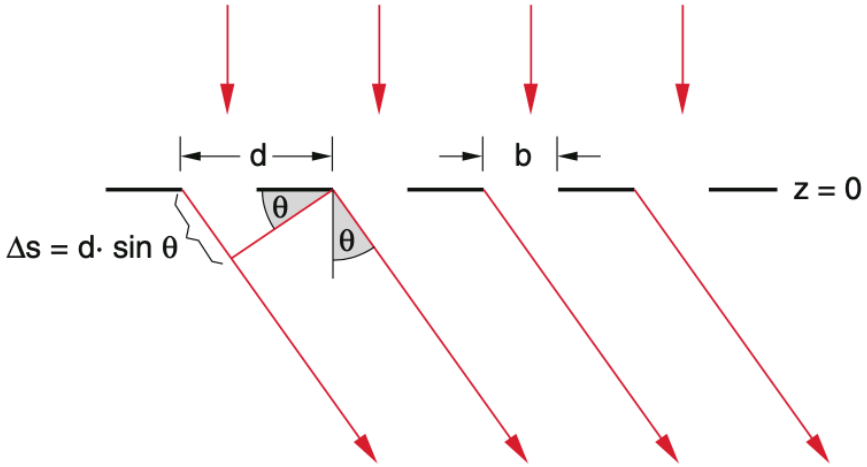
Single Slit Diffraction

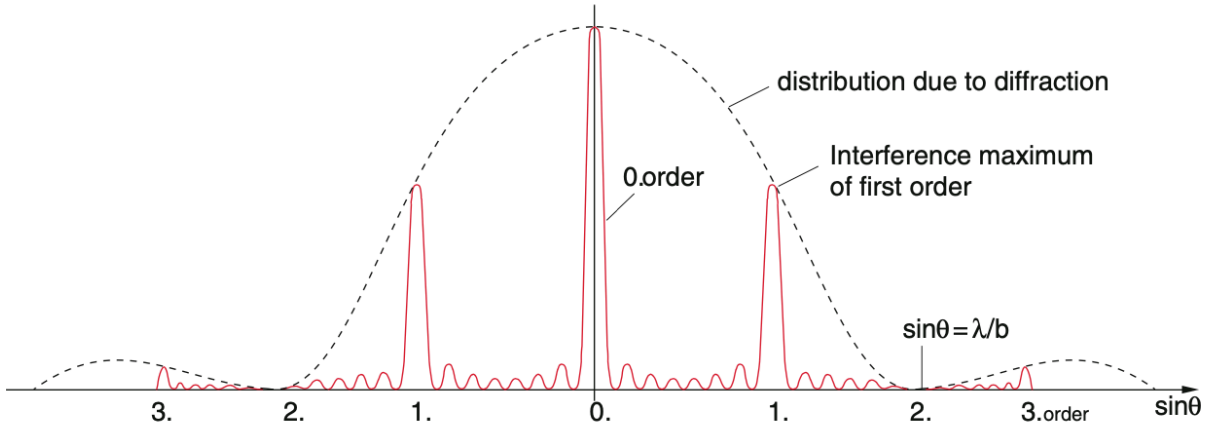


circular aperture

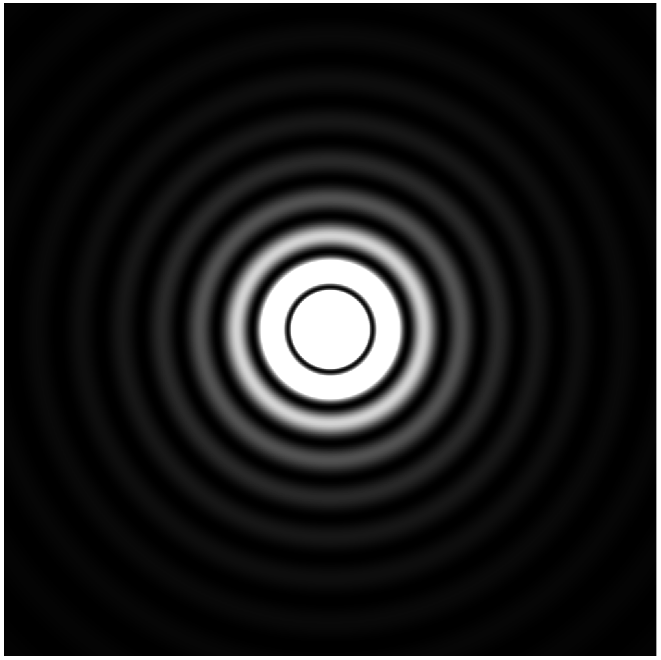


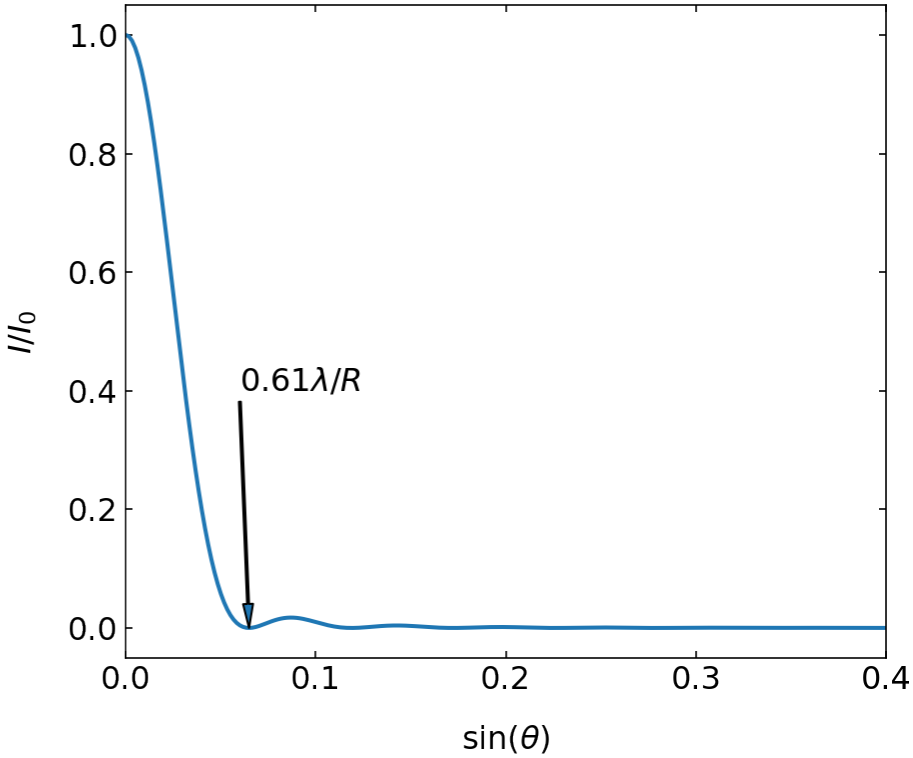
Diffraction Grating





Circular Aperture





Optical Resolution