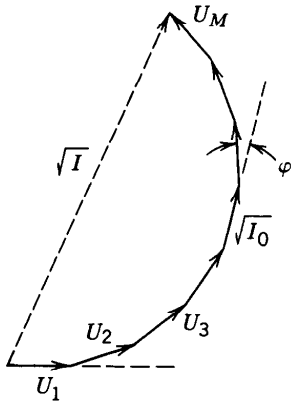
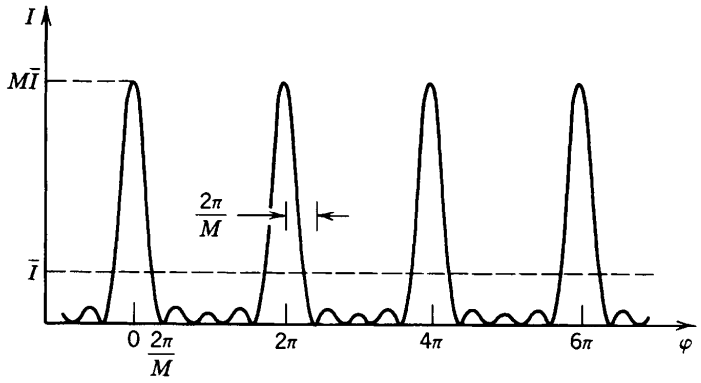
Experimental Physics 3 - Em-Waves,Optics, Quantum mechanics

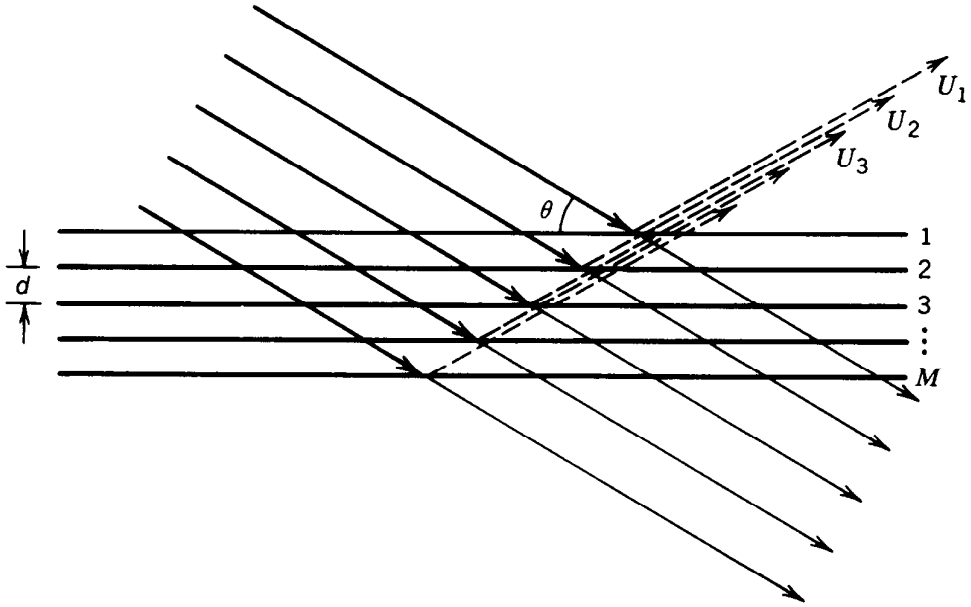
Lecture 10

Prof. Dr. Frank Cichos
WS 2022/23

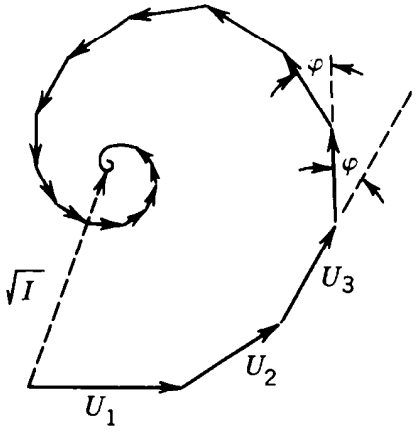
Multiple Wave Interference - Constant Intensity

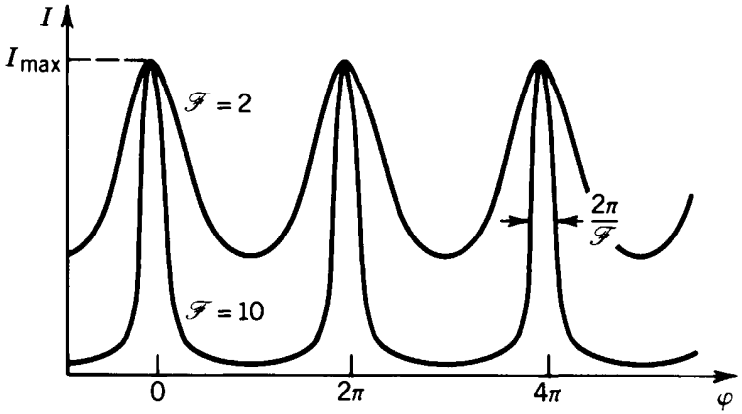


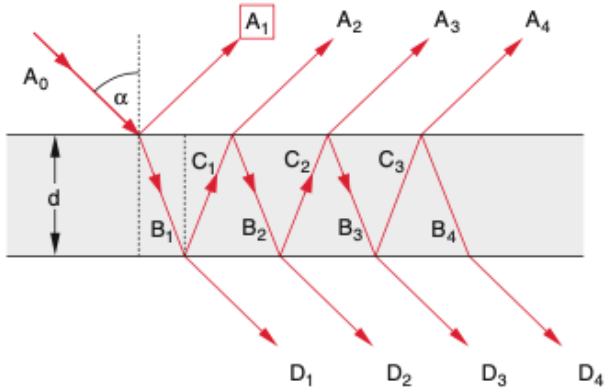




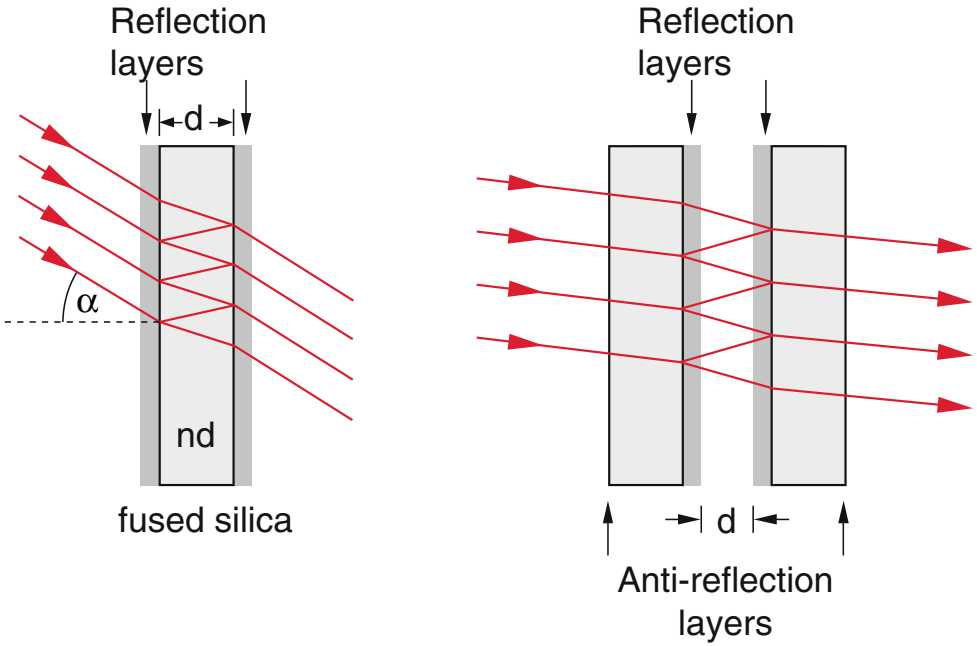
Multiple Wave Interference - Decaying Intensity

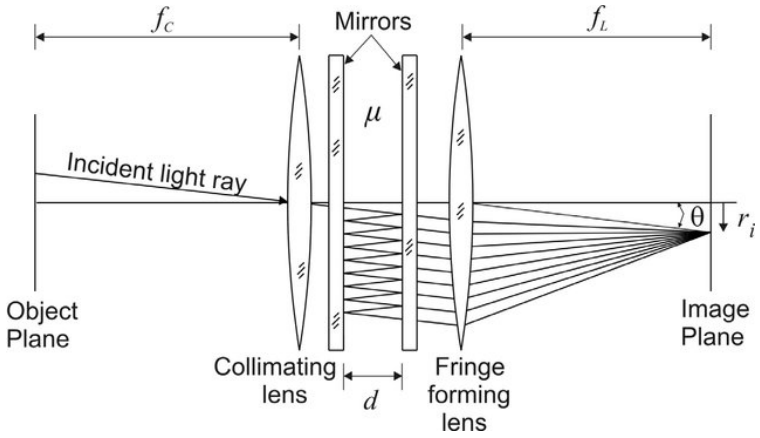




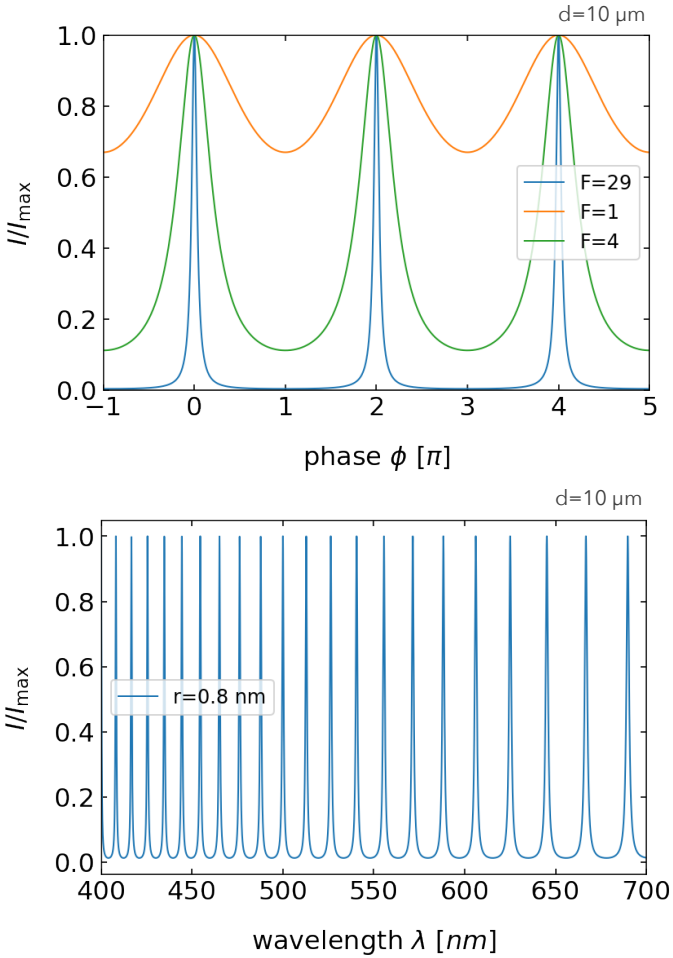


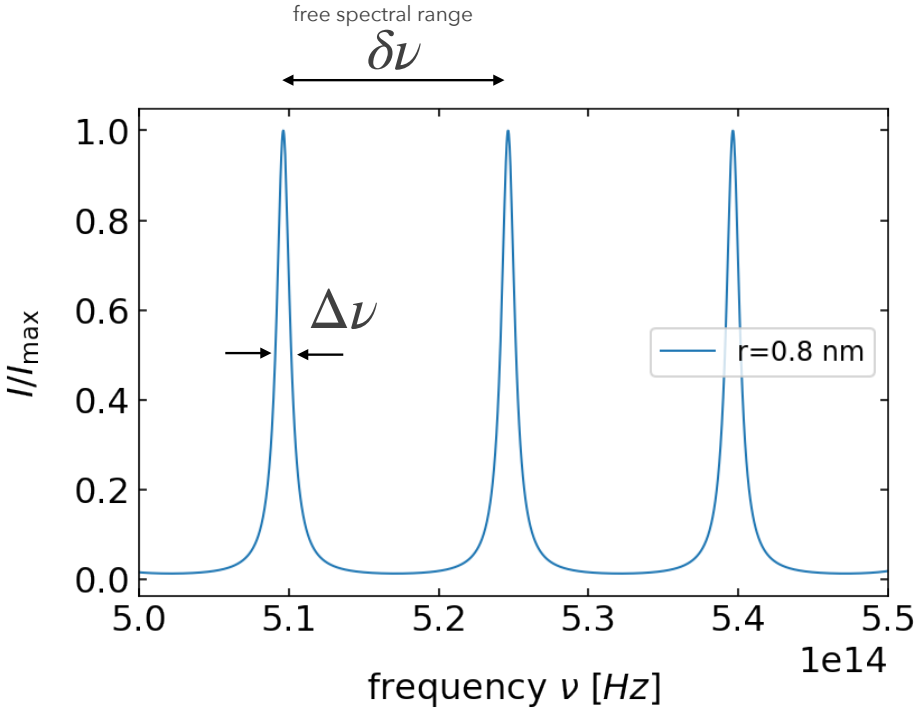
Fabry Perot Interferometer





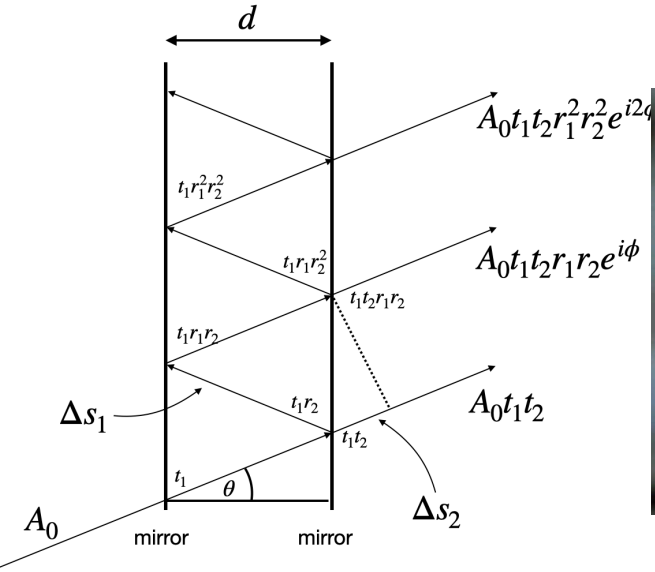
Fabry Perot Interferometer

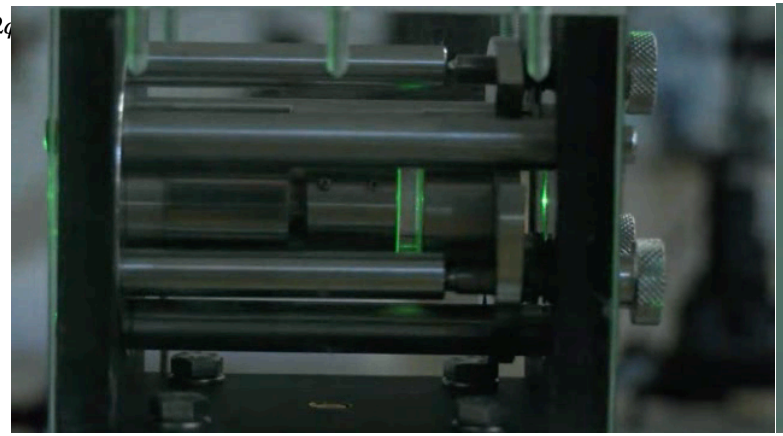


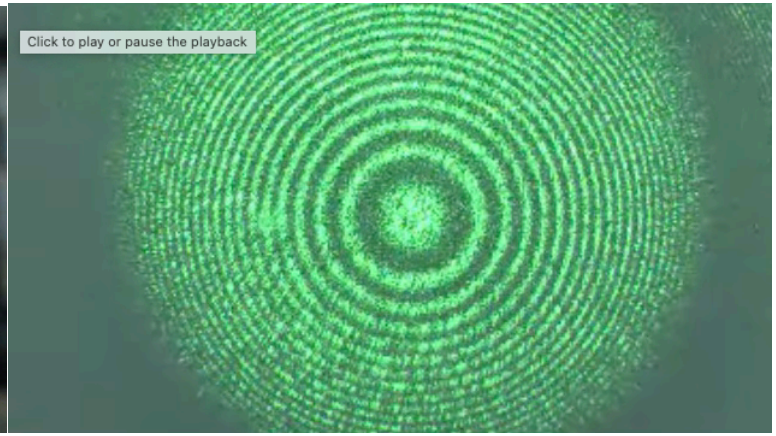


$$\mathcal{F} = \frac{\delta\nu}{\Delta\nu}$$

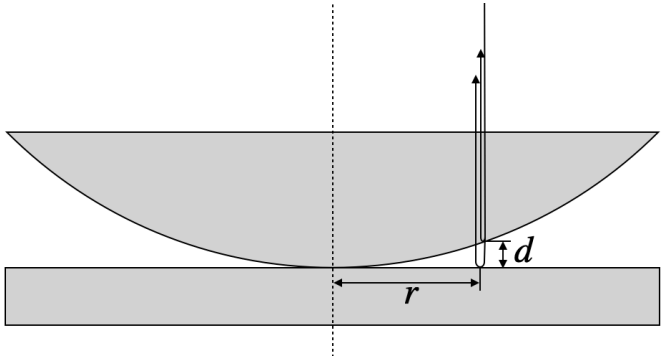
Fabry Perot Interferometer

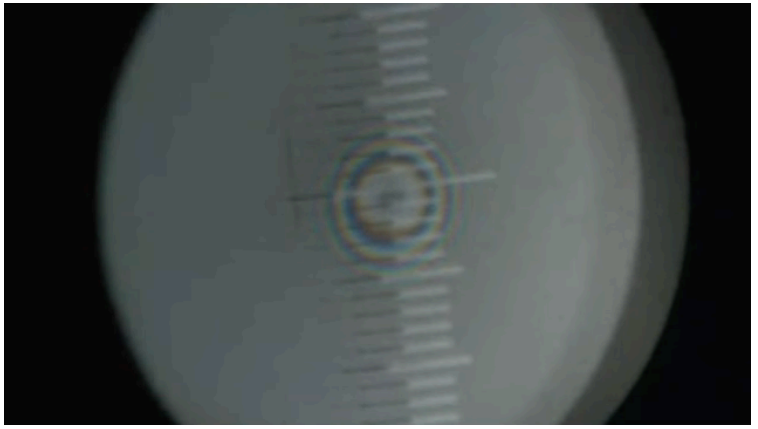






Newton Rings

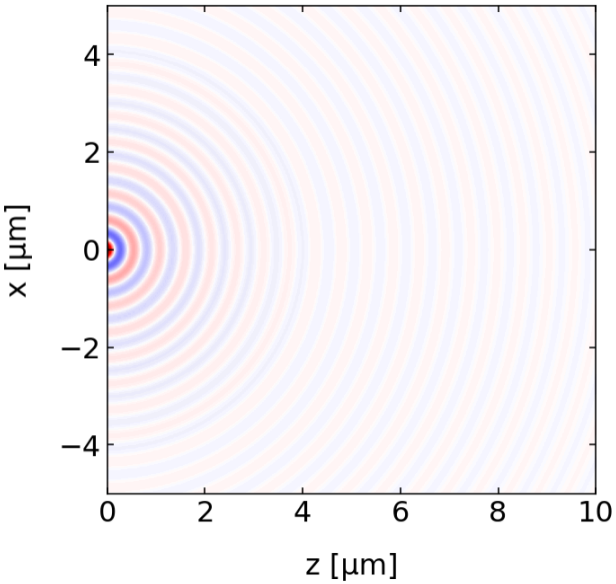




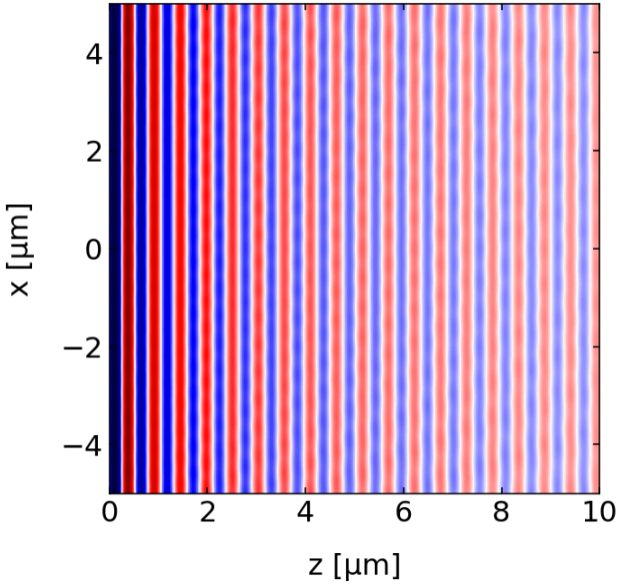
2.3 Diffraction

2.3.1 Huygens Principle

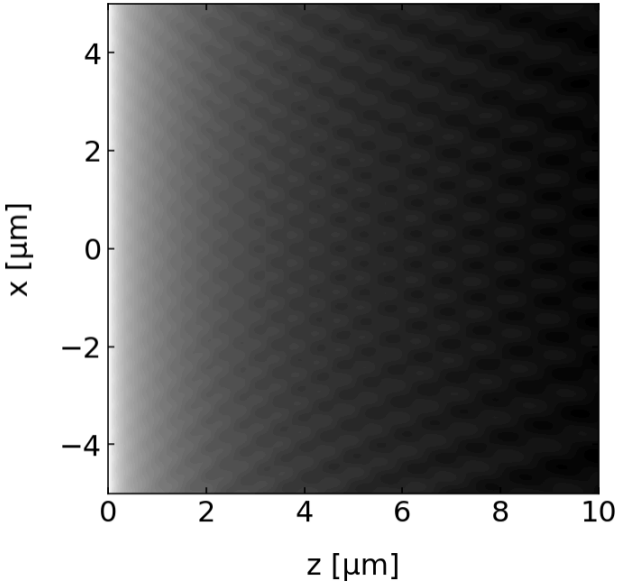
single spherical wave



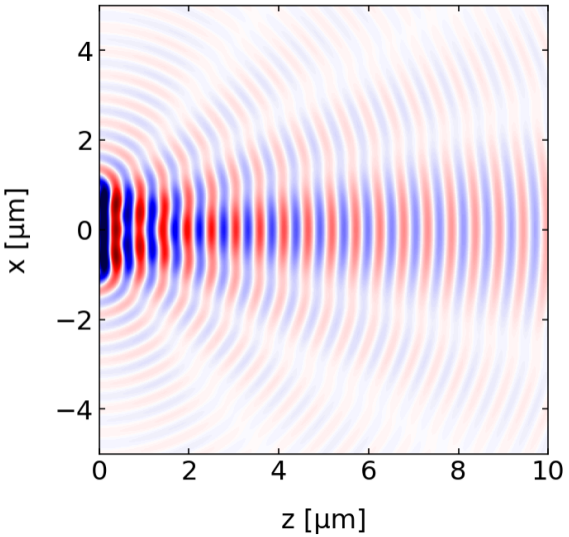
500 spherical waves

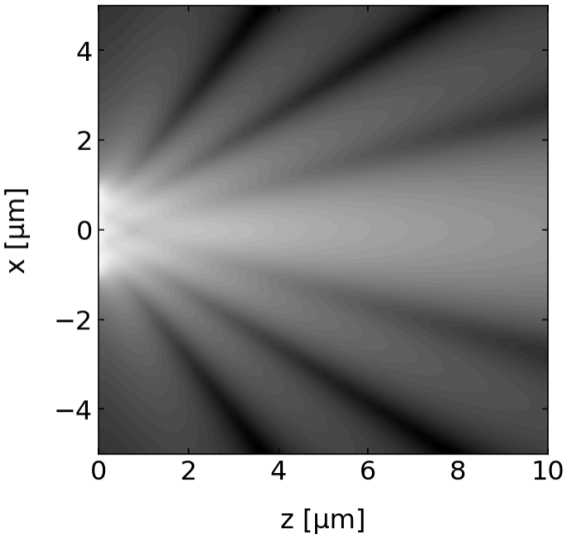


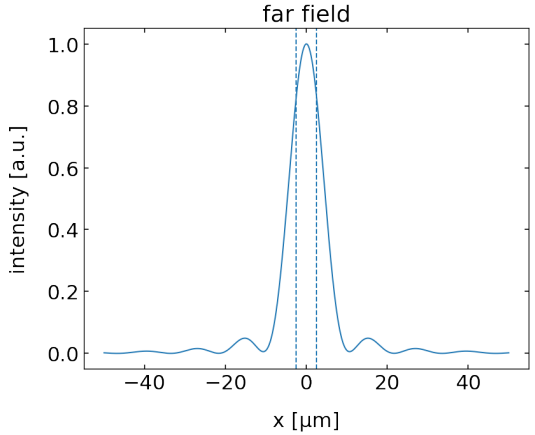
Intensity

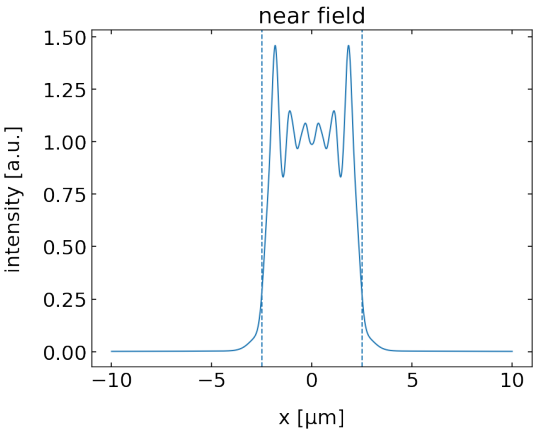


2.3.2 Single Slit

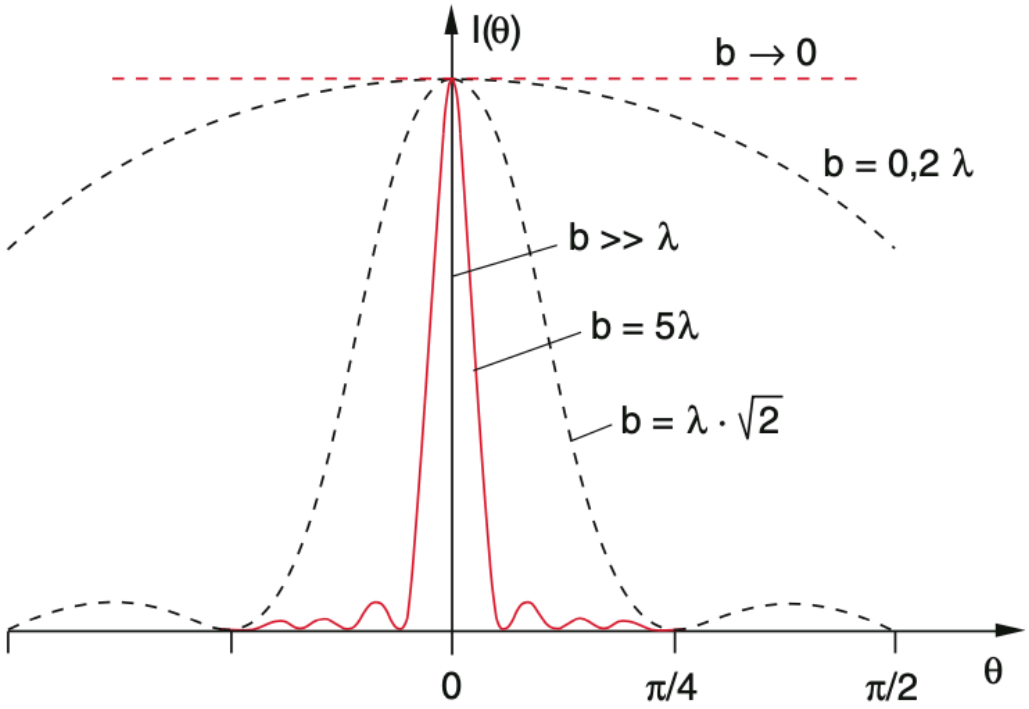




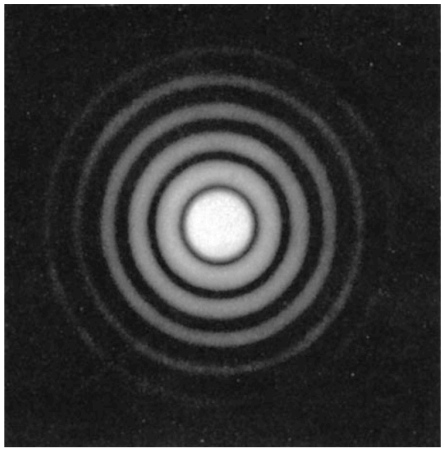




Single Slit Diffraction



circular aperture



Diffraction Grating