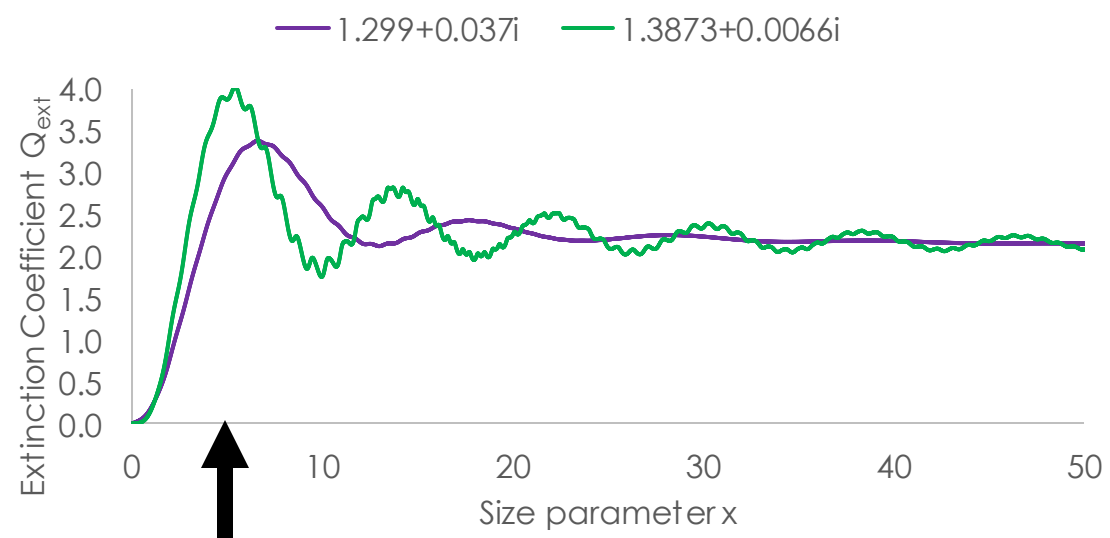
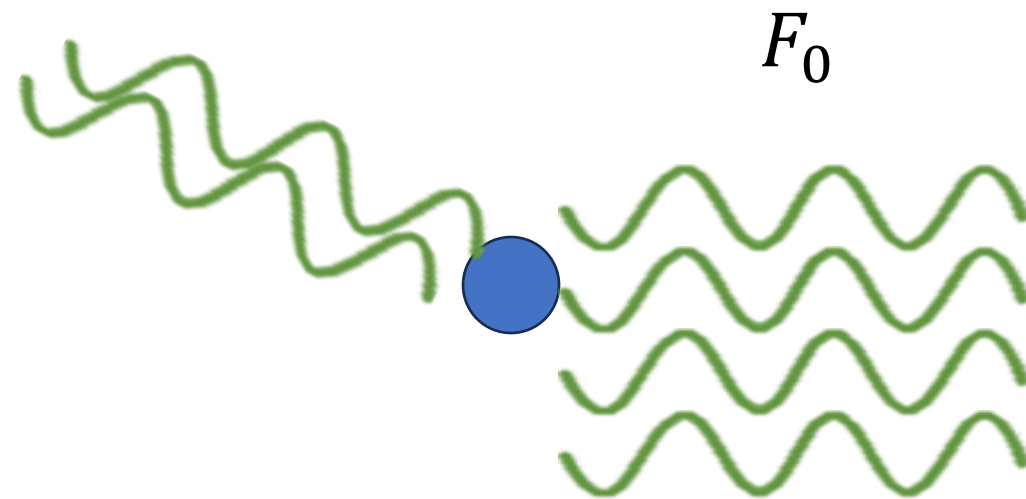
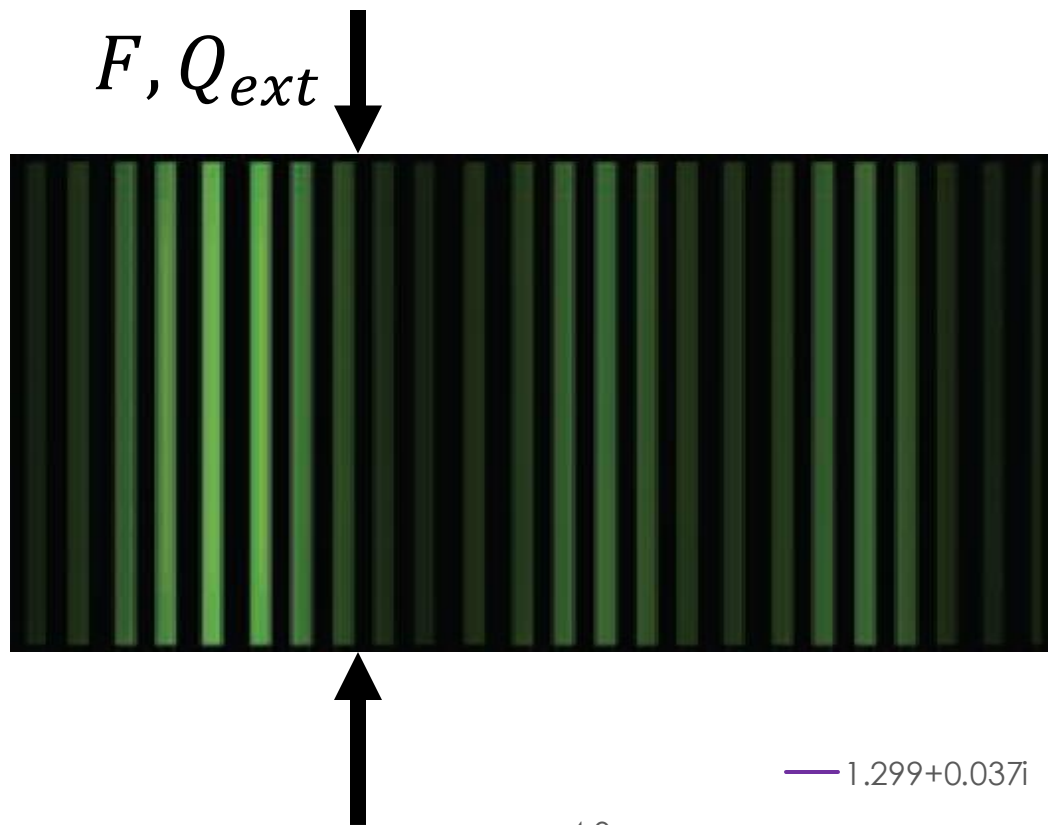


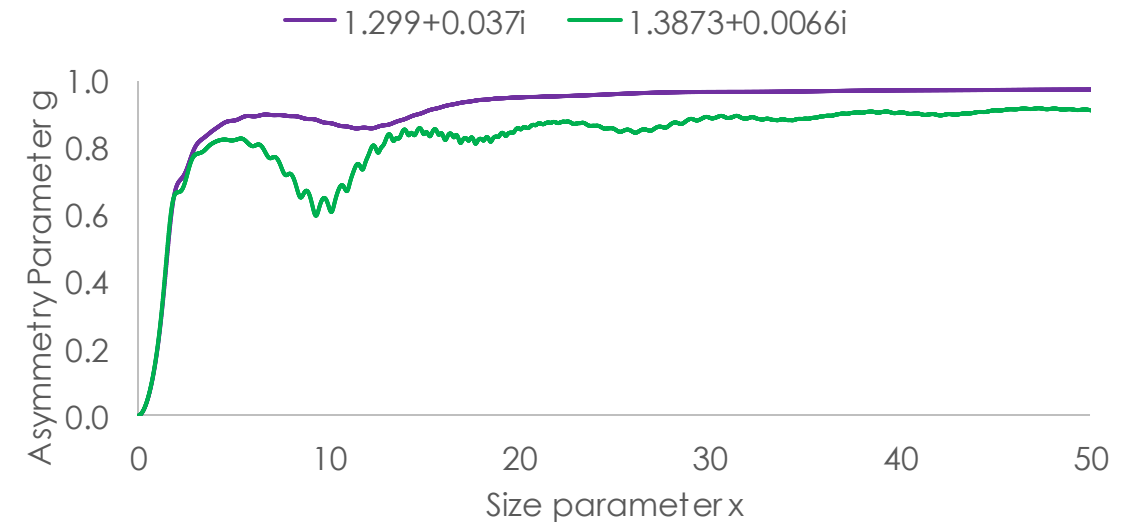
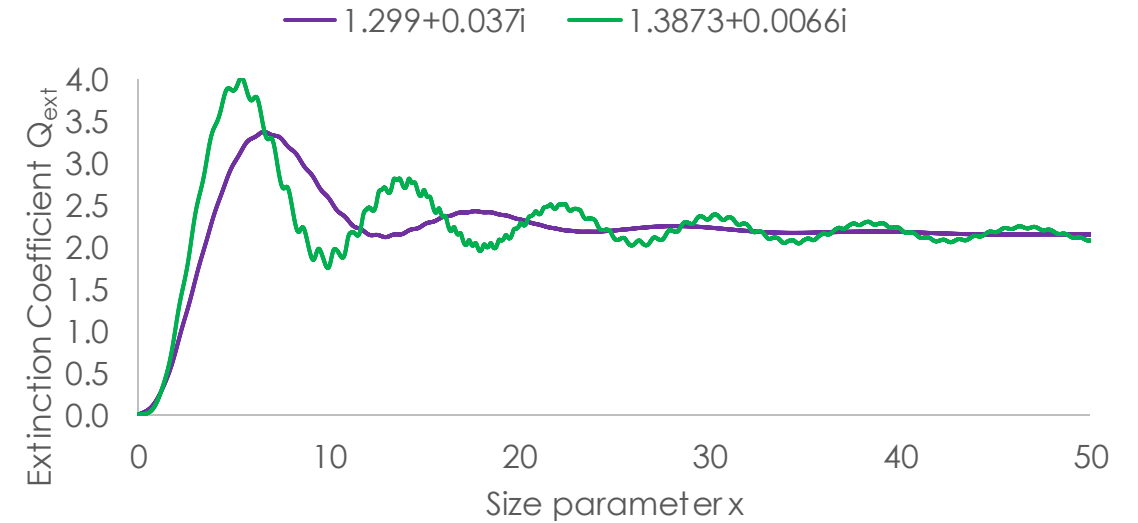
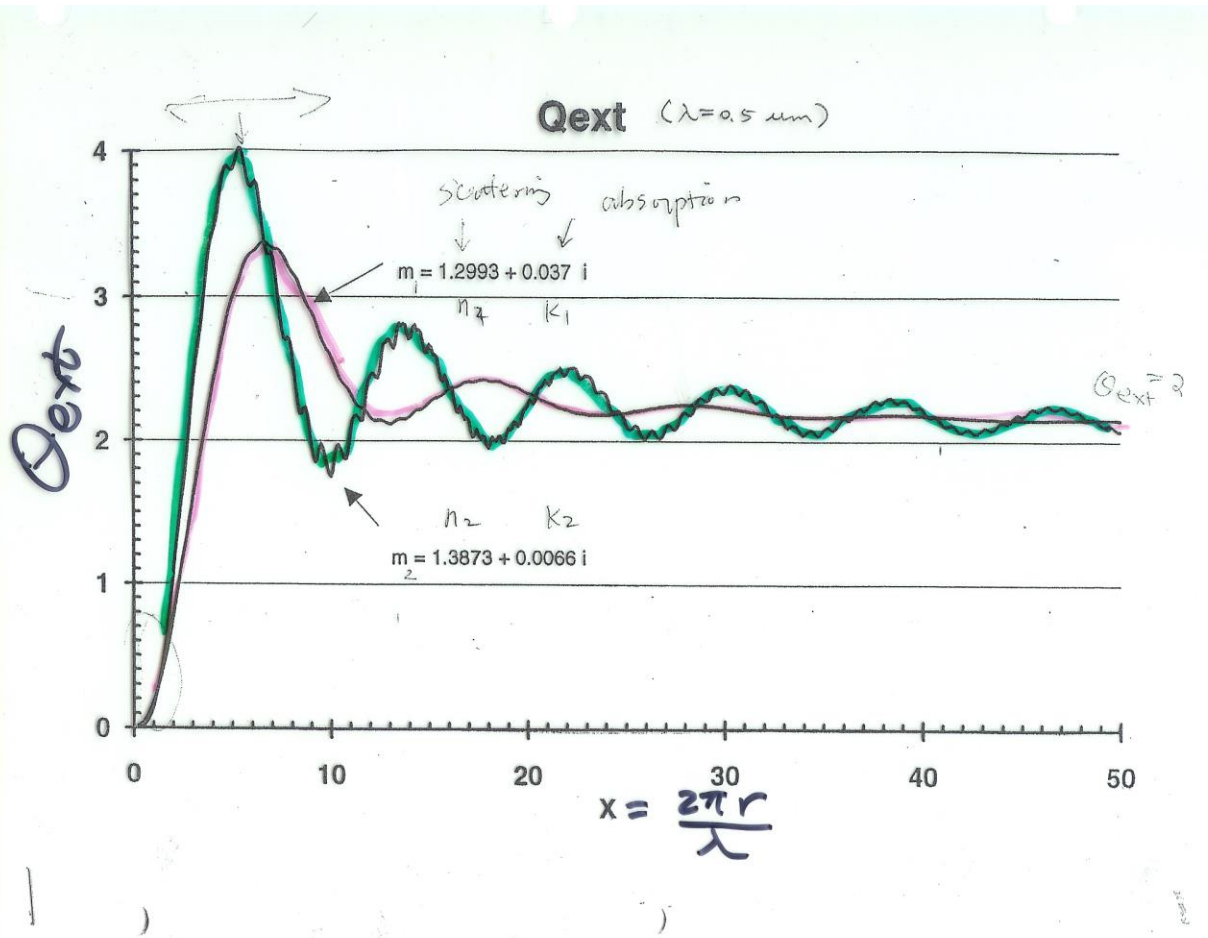
ATMO 656A – HW6v2 & HW7

Edgardo I. Sepulveda Araya

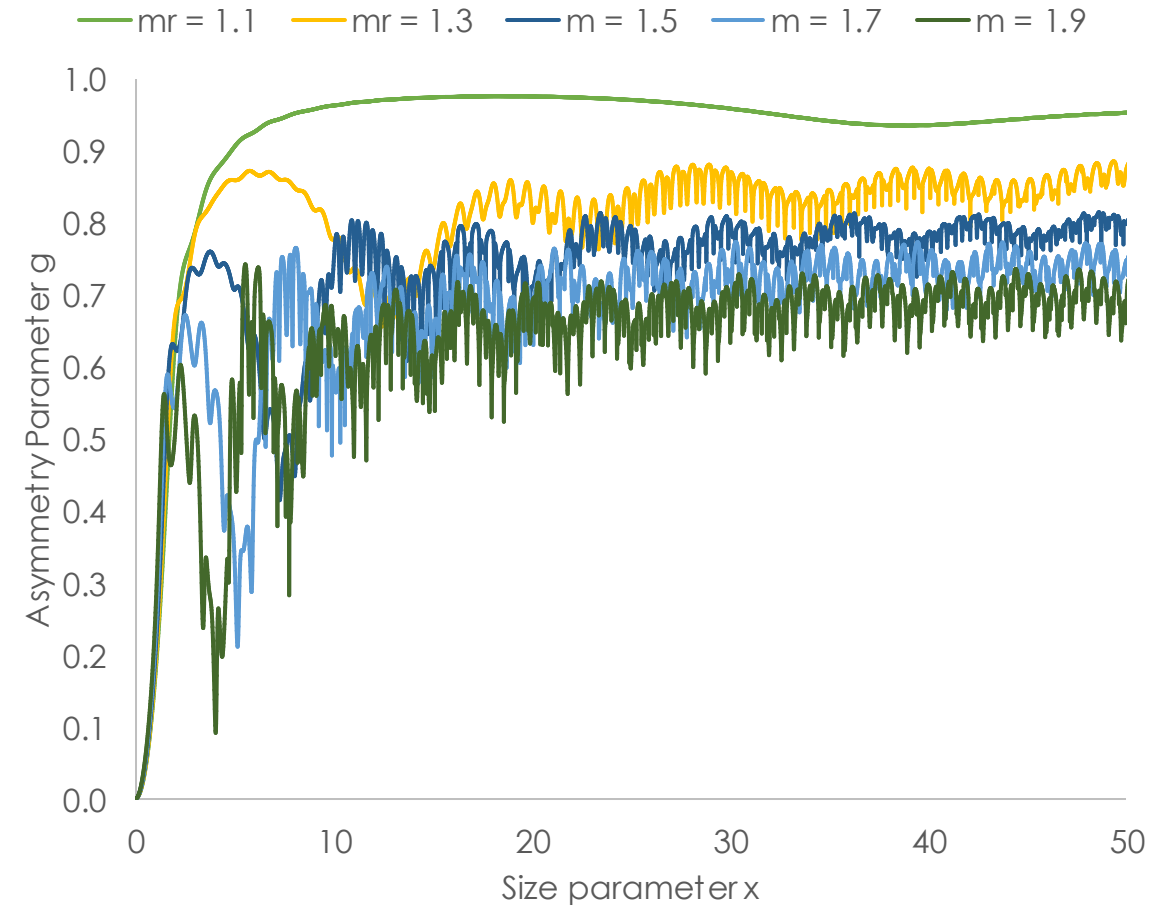
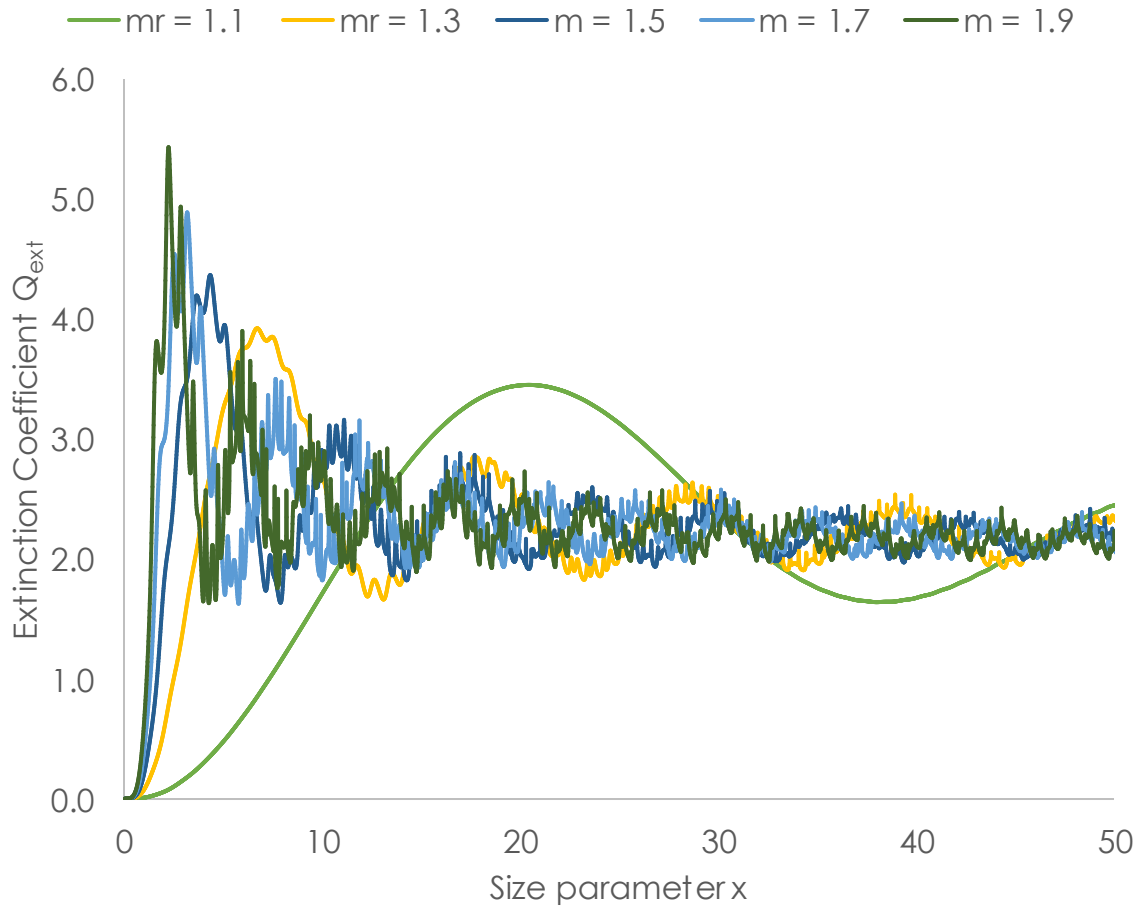


Q_{ext} for $\lambda = 0.55 \mu\text{m}$ and r from 0.001 to $10 \mu\text{m}$ ($0.001 \mu\text{m}$ step):

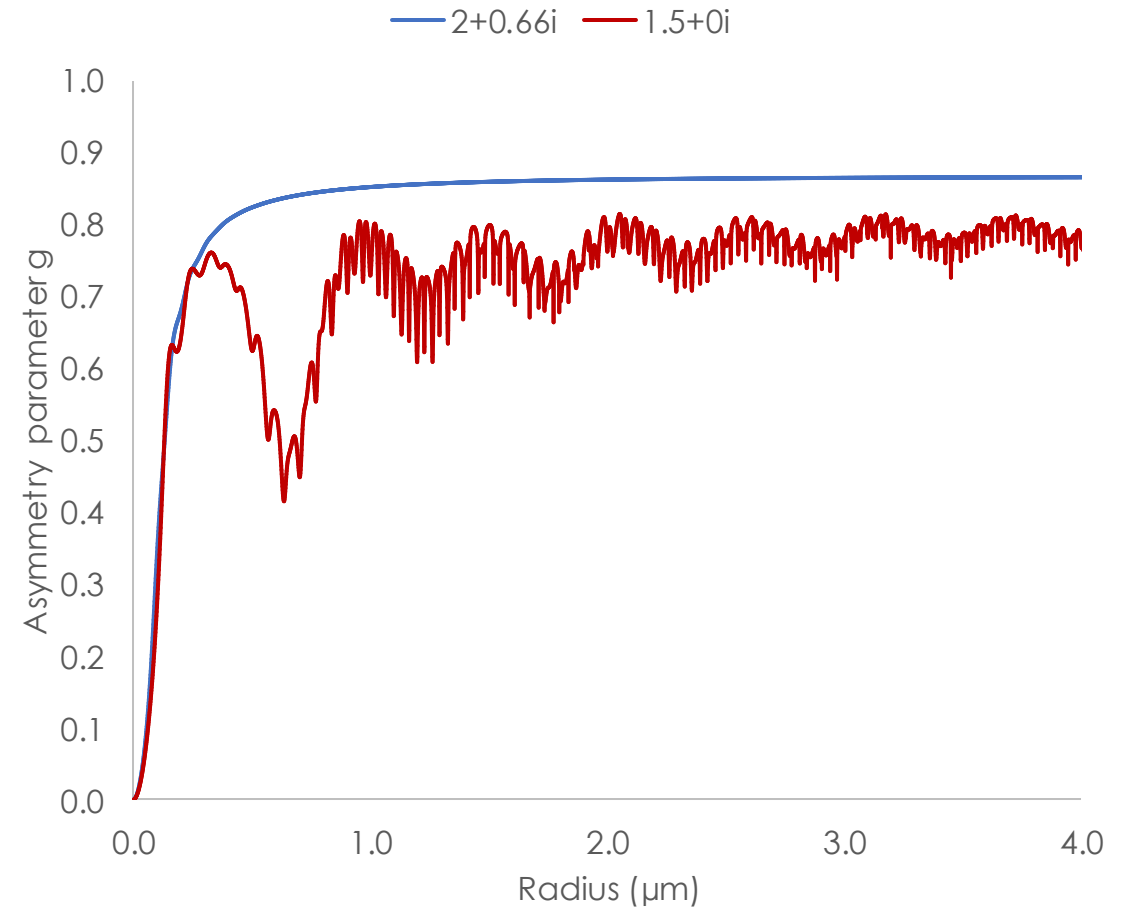
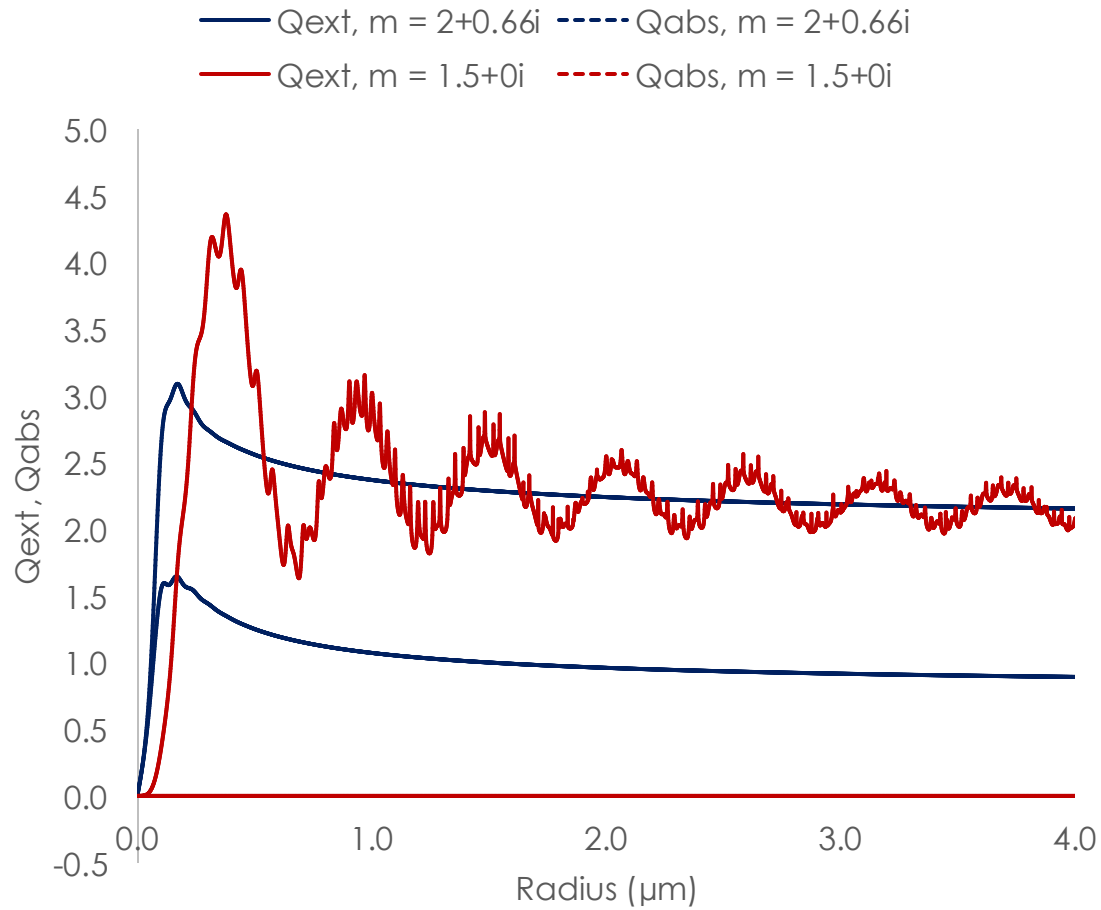
Size parameter range from 0 to 50 ($r \sim 4.4 \mu\text{m}$) is showed



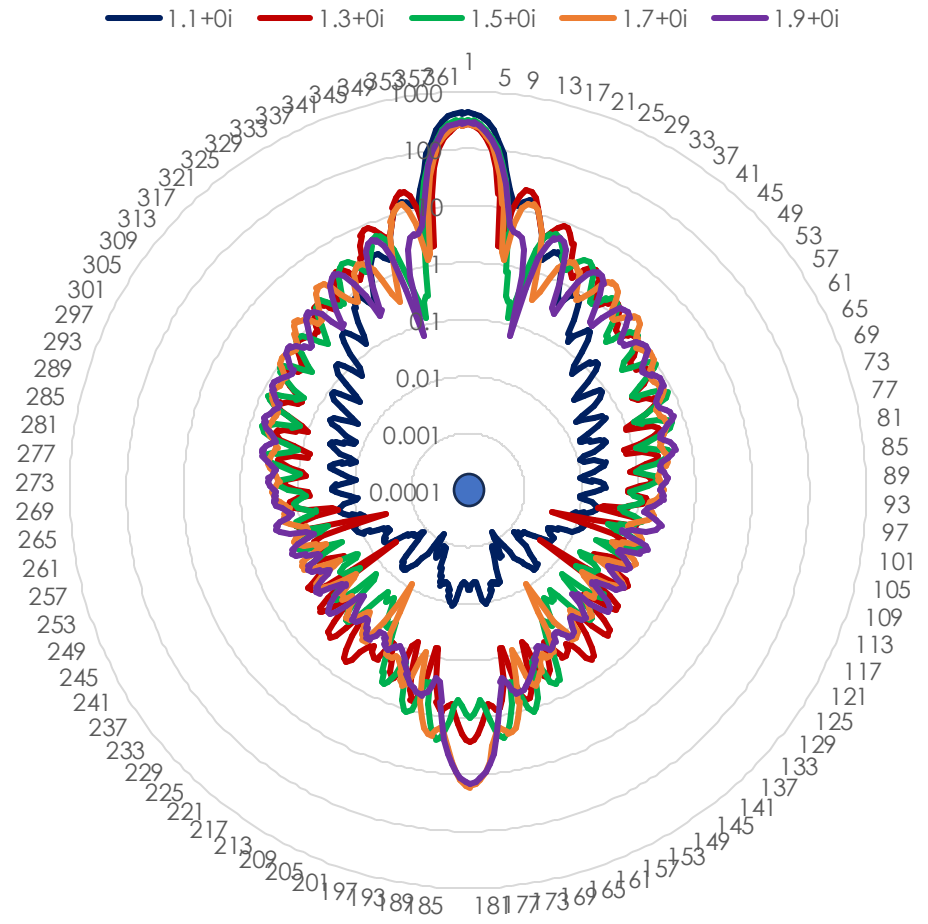
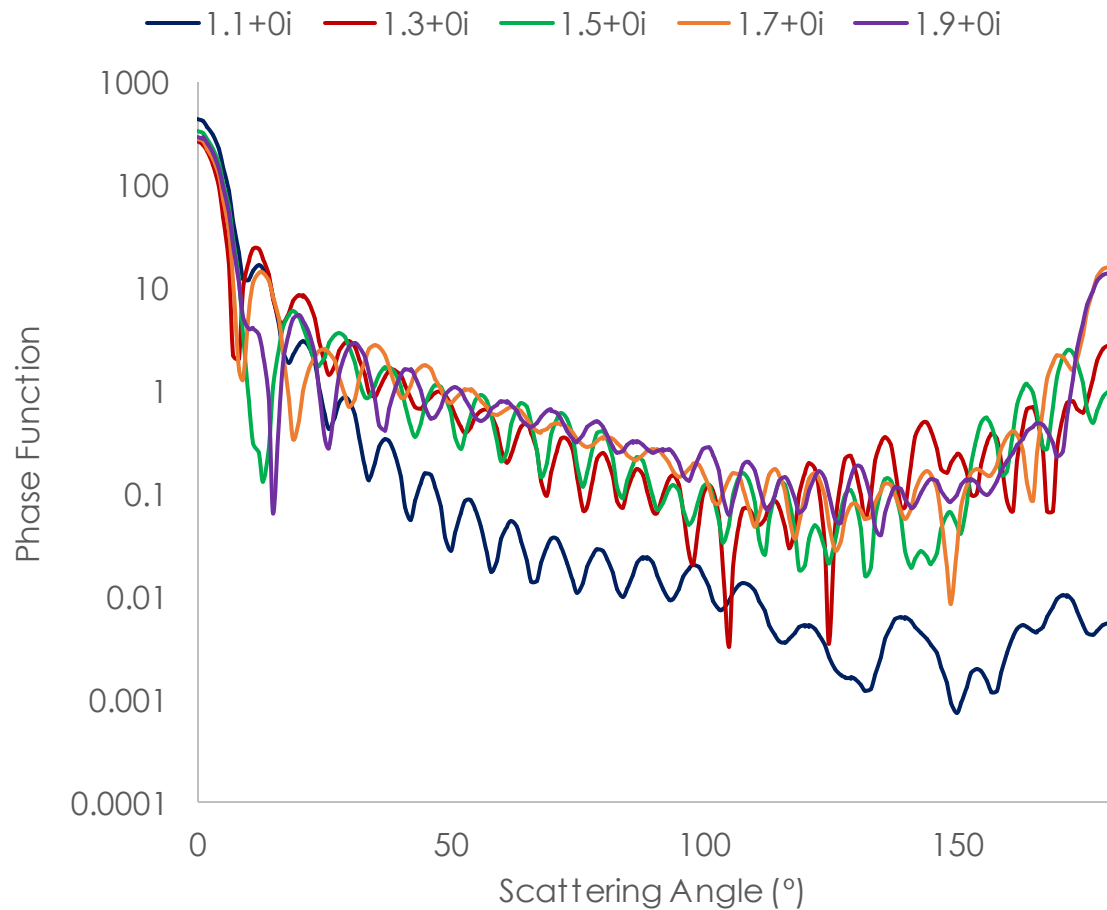
What about $m_i = 0$ and different m_r ?



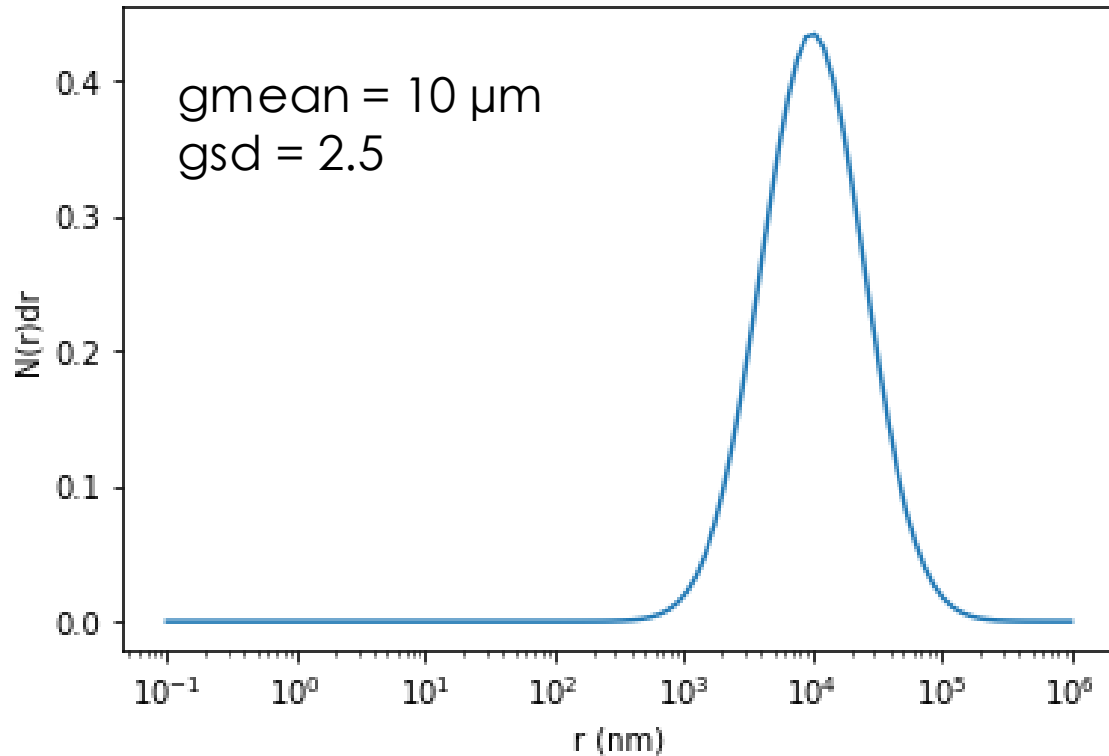
Q_{ext} and Q_{abs} for $\lambda = 0.55 \mu\text{m}$ and r from 0.001 to $10 \mu\text{m}$ ($0.001 \mu\text{m}$ step):



What about $m_i = 0$ and different m_r ?



HW7



$$N(r)dr = \frac{1}{\sqrt{2\pi}\ln(\sigma_g)} \exp\left(-\frac{(\ln(r) - \ln(r_g))^2}{2(\ln(\sigma_g))^2}\right)$$

$$\overline{Q_{ext}} = \frac{1}{N_0} \int_0^{\infty} Q_{ext}(r)N(r)dr$$

$Q_{ext}(r)$ computed with `PyMieScatt.MieQ()`*

*<https://pymiescatt.readthedocs.io/en/latest/index.html>

HW7

$$m = 1.3873 + 0.0066i$$

$$\lambda = 0.5 \mu\text{m}$$

