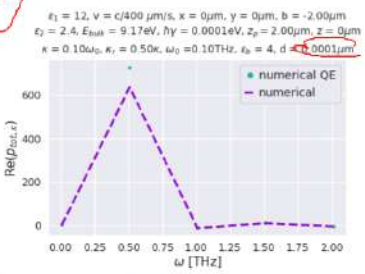
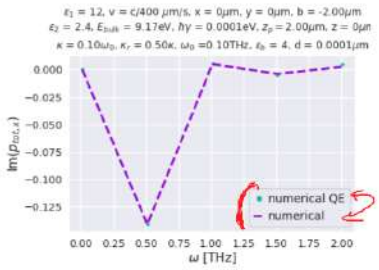


(a) Real part



(b) Imaginary part

Figure 6: $\mathbf{p}_x$ vs ω. At a point $\mathbf{r} \neq \mathbf{0}$

1.5 Polarizability

We can also model the polarizability with the Lorentzian model: