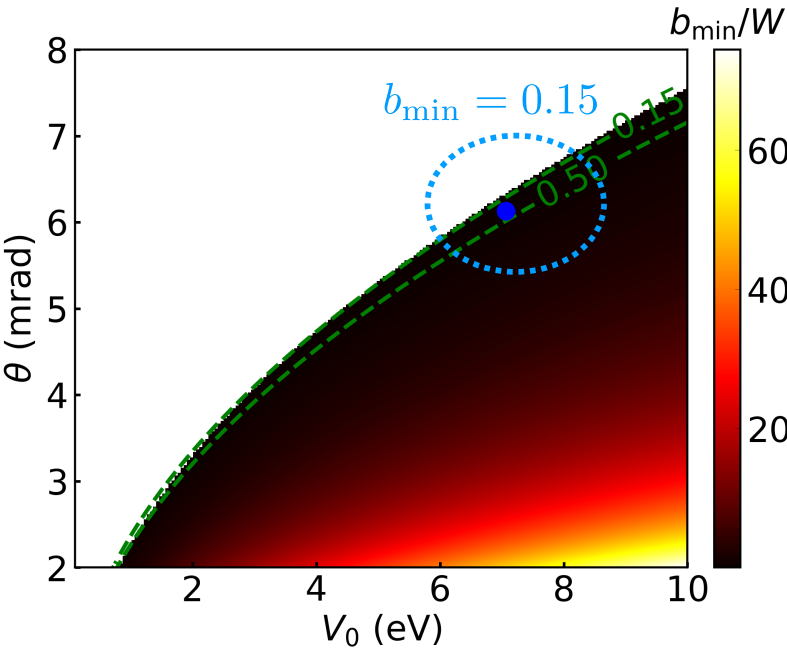


BEM 2D: EELS of rectangular waveguide for a parallel trajectory

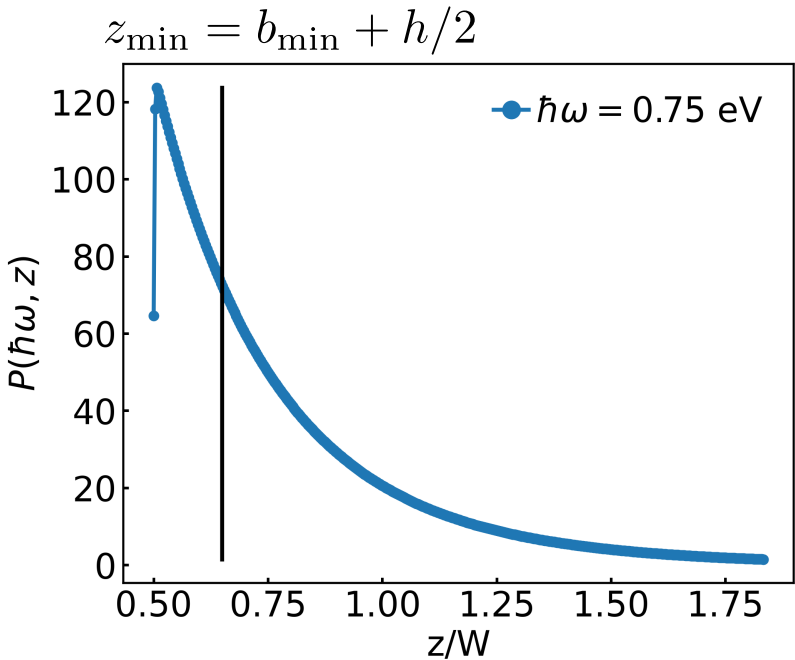
Correction of the trajectory and integration

$$P(\omega) = 2 \int_{z_{\min}}^{\infty} \frac{\beta dz}{\sqrt{\beta^2 \sin^2 \theta + \frac{2eV(z)}{m_e c^2 \gamma_e}}} \boxed{\frac{d\Gamma_{\text{EELS}}(z, \omega)}{dy}} \text{ from bem2D}$$

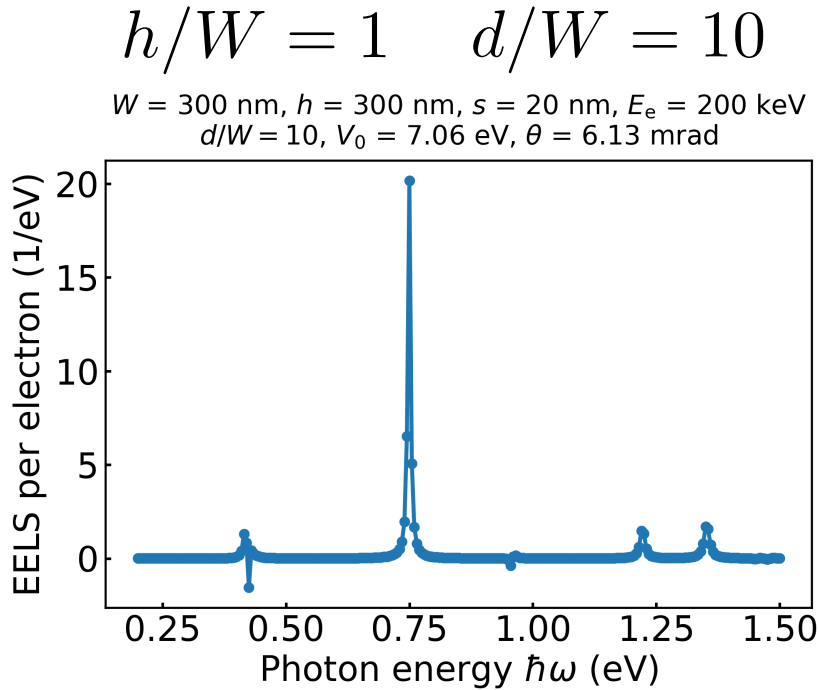
Determined by V_0 and θ



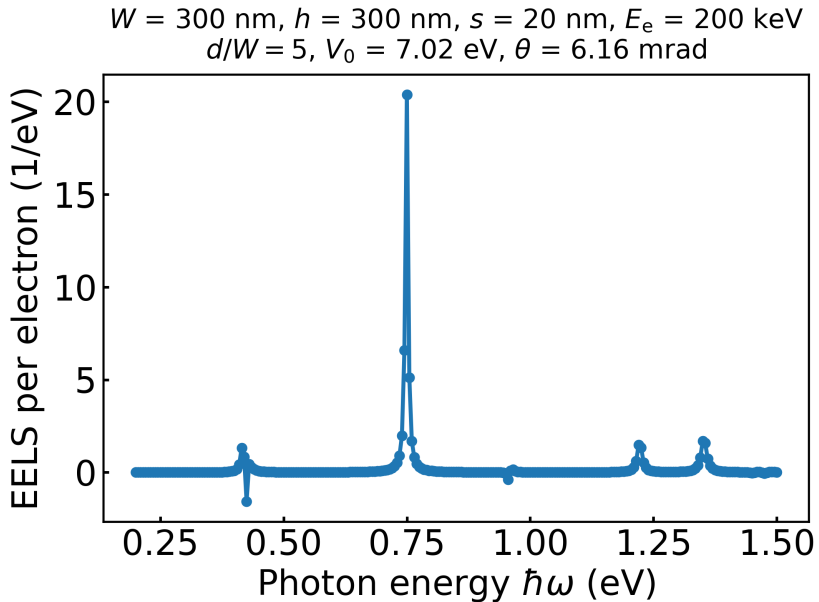
$h/W = 1 \quad d/W = 10$



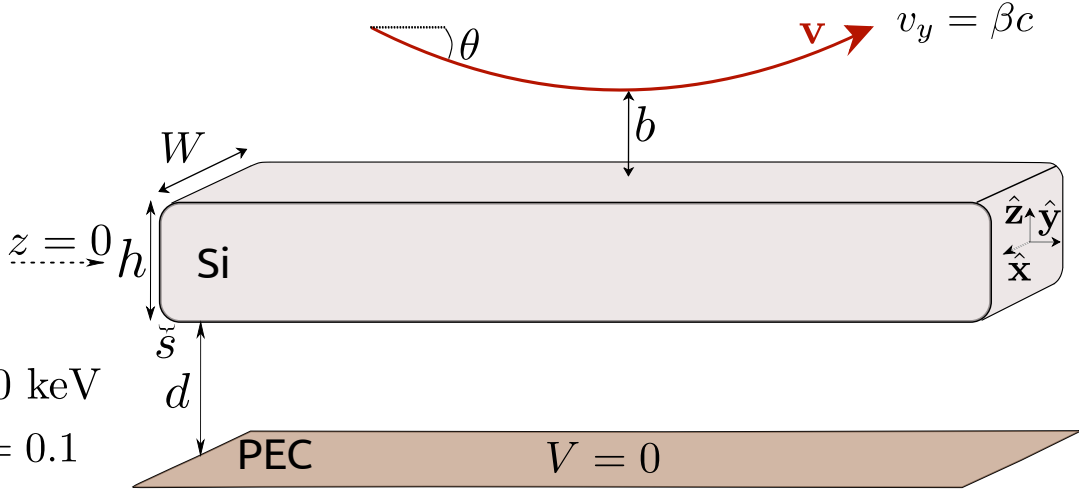
Integration over z



$h/W = 1 \quad d/W = 5$

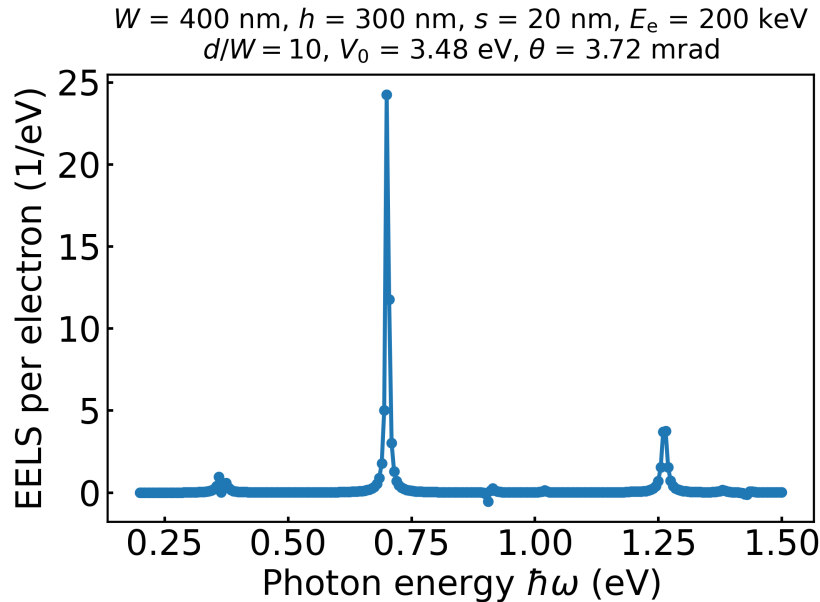


Differences in amplitude is given by V_0



$E_e = 200$ keV
 $s/W = 0.1$

$h/W = 0.75 \quad d/W = 10$



$h/W = 0.75 \quad d/W = 5$

