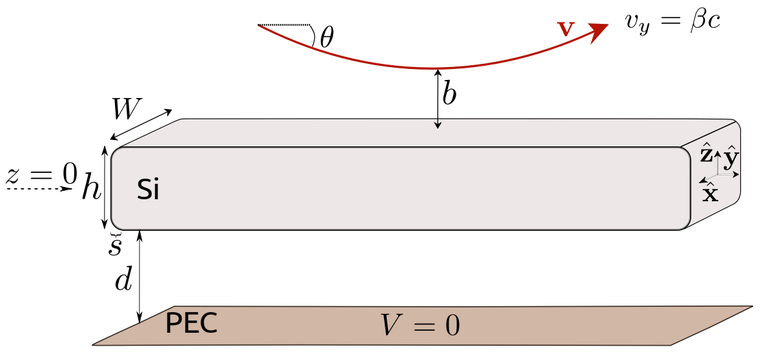
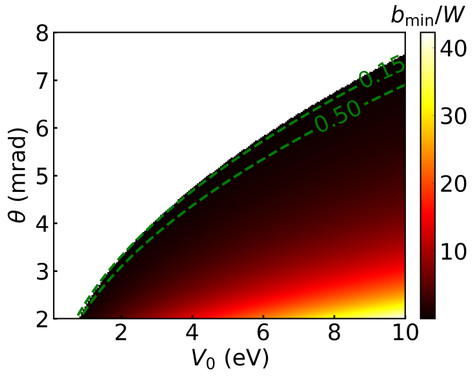
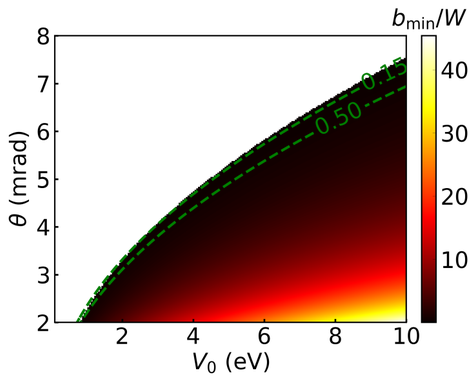
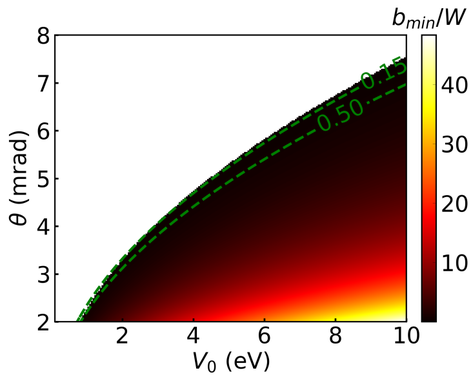
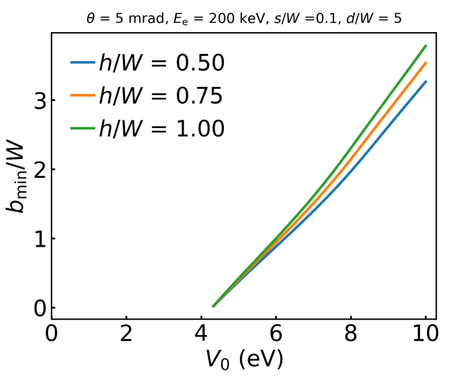
Electron-coupling-to-WG: Potential near rectangular nanowire

From motion equation: $\dfrac{\mathrm{d}z}{\mathrm{d}t} = \sqrt{\dfrac{2eV(z)}{m_\mathrm{e}\gamma_\mathrm{e}} + v_{\perp\infty}^2}$

Minimum value of z: $0 = \dfrac{V(z_\mathrm{min})}{V_0} + \dfrac{m_\mathrm{e}c^2\gamma_\mathrm{e}}{2e}\dfrac{\beta^2\sin^2\theta}{V_0}$



$E_\mathrm{e} = 200\ \mathrm{keV} \quad s/a = 0.1$

	$h/W = 0.50$	$h/W = 0.75$	$h/W = 1$	$\theta = 5$ mrad
$d/W = 5$				
$d/W = 10$