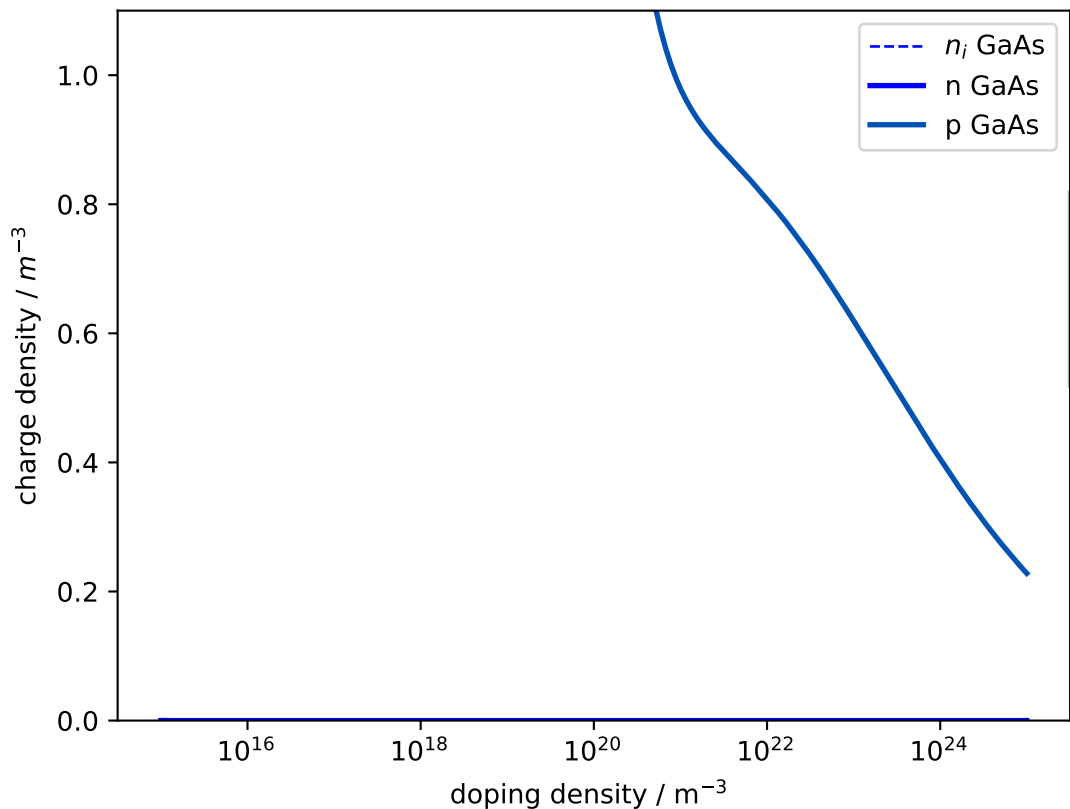


Charge Density vs doping density for GaAs at  $T = 300\text{K}$



GaAs Parameters

$$E_g = 1.42 \text{ eV}$$

$$m_n^* = 0.067 m_0$$

$$m_p^* = 0.51 m_0$$