

The modified DeBroglie's law document

For photons with rest mass $m_0 = 0 \Rightarrow p = E/c$ with Planck's law $E = h\nu = h \cdot c/\lambda$ we substitute in equation $p = E/c$ have DeBroglie hypothesis for massless particle $\lambda = \frac{h}{p}$ and De Broglie extended to particles that have mass in the form: $\lambda = \frac{h}{p} = \frac{h}{mV}$

For the electron, the Planck law is: $E = h \cdot \nu$ thus DeBroglie law is approximative $\lambda = \frac{h}{p} = \frac{h}{mV}$.

The magnetron with the speed "c" has a DeBroglie wave length associated $\sim \lambda = \frac{h_m}{p} = \frac{h_m}{mc}$ where h_m is the Planck constant of magnetron $E_m \sim 2.58775605 \cdot 10^{-8} \nu - 2.323361194 \cdot 10^{-17} \cdot \nu^2 + 5.821424834 \cdot 10^{-27} \nu^3 - 4.600000005 \cdot 10^{-46} \cdot \nu^5$ thus for the linear approximation $E_m \sim h_{m1} \cdot \nu$ we have the DeBroglie associated wave With $h_{m1} = 2.58775605 \cdot 10^{-8} \text{ eV} \cdot \text{s}$ thus we have the approx.. $\lambda = h_{m1}/p$

We start with the Klein-Gordon equation.

$$E = mc^2 = \sqrt{p^2 c^2 + m_0^2 c^4}$$

For particles with rest mass $m_0 \neq 0 \Rightarrow$ Planck's law in linear approx. $E = h \cdot \nu = h \cdot c/\lambda$ we have...
to be continued...