Graph L(E)

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26/05/19

- m =
$$9.1 * 10^{-31}$$

$$-a = 1-10$$

$$- U = 3-10$$

-
$$\hbar = 6.6 * 10^{-34}$$

- E-U>0, E>0
$$\begin{cases} æ_1 = \frac{2mE}{\hbar^2} \\ æ_2 = \frac{2m(E-U)}{\hbar^2} \\ 2L = 2\cos\frac{w_1^2 * a}{2}\cos\frac{w_2^2 * a}{2} - (\frac{w_1}{w_2} + \frac{w_2}{w_1})\sin w_1 \frac{a}{2}\sin w_2 \frac{a}{2} \end{cases}$$

- E-U<0, E>0
$$\begin{cases}
 & \text{e.} = \frac{2mE}{\hbar^2} \\
 & \text{e.} = \frac{2m(U-E)}{\hbar^2} \\
 & \text{2}L = 2\cos\frac{x_1^2*a}{2}\cosh\frac{x_2^2*a}{2} - (\frac{x_1}{x_2} + \frac{x_2}{x_1})\sin x_1\frac{a}{2}\sinh x_2\frac{a}{2}
\end{cases}$$

- E-U<0, E<0
$$\begin{cases}
 &\text{e. } = -\frac{2mE}{\hbar^2} \\
 &\text{e. } = \frac{2m(U-E)}{\hbar^2} \\
 &\text{e. } = 2\cosh\frac{\varpi_1^2*a}{2}\cosh\frac{\varpi_2^2*a}{2} - (\frac{\varpi_1}{\varpi_2} + \frac{\varpi_2}{\varpi_1})\sinh\varpi_1\frac{a}{2}\sinh\varpi_2\frac{a}{2}
\end{cases}$$

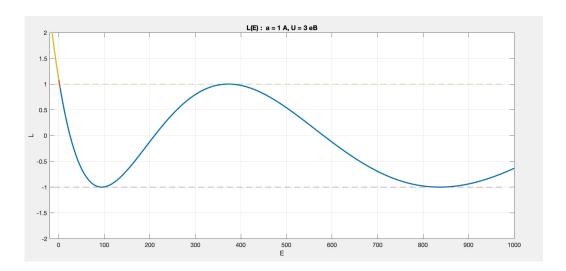


Figure 1: a = 1A, U = 3eB

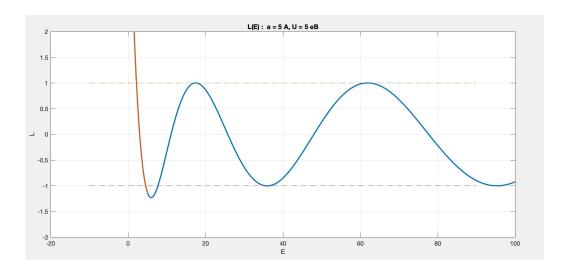


Figure 2: a = 5A, U = 5eB

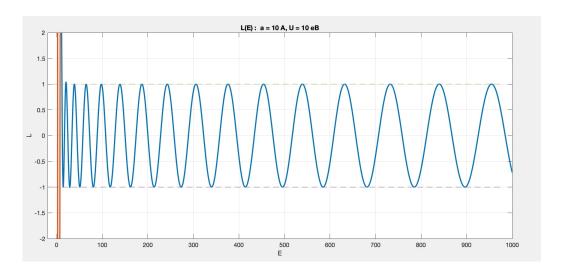


Figure 3: a = 10A, U = 10eB

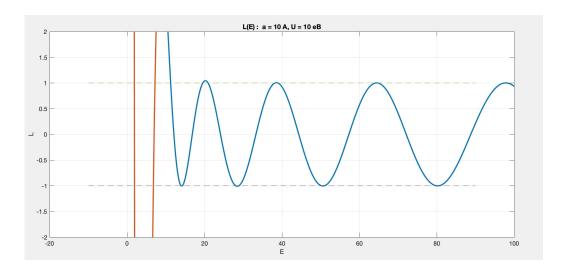


Figure 4: a = 10A, U = 10eB