

In[]:= R[b_, t_] =

FullSimplify[Integrate[64 / Pi ^ 2 Cos[s t] Exp[-b s] s ^ 2 Exp[- 4 s ^ 2 / Pi], {s, 0, Infinity}]]

[simplifica compl... [integra [núm... [coseno [exponencial [exponencial [número pi [infinito

$$\text{Out[]} = \frac{1}{8} e^{-\frac{1}{16} \pi t (2 i b + t)} \left(-8 b e^{\frac{1}{16} \pi t (2 i b + t)} + e^{\frac{b^2 \pi}{16}} (8 + \pi (b - i t)^2) - e^{\frac{b^2 \pi}{16}} (8 + \pi (b - i t)^2) \text{Erf}\left[\frac{1}{4} \sqrt{\pi} (b - i t)\right] + e^{\frac{1}{16} b \pi (b + 4 i t)} (8 + \pi (b + i t)^2) \text{Erfc}\left[\frac{1}{4} \sqrt{\pi} (b + i t)\right] \right)$$

In[]:= G[b_, t_] =

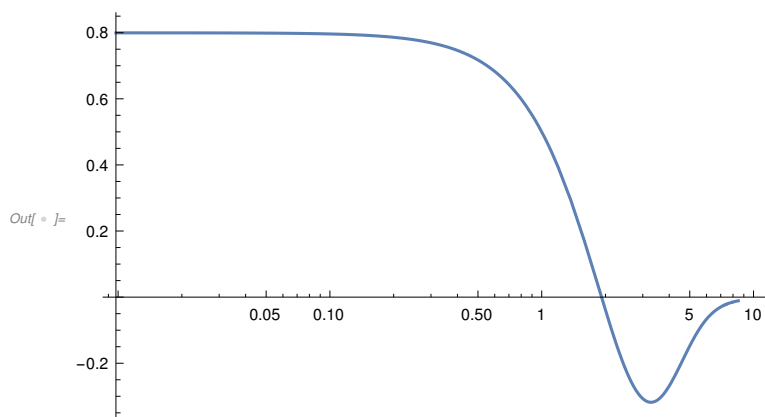
FullSimplify[Integrate[32 / Pi ^ 2 Exp[I s t] Exp[-b s] s ^ 2 Exp[- 4 s ^ 2 / Pi], {s, 0, Infinity}]]

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$$\text{Out[]} = \frac{1}{8} \left(-4 b + 4 i t + e^{\frac{1}{16} \pi (b - i t)^2} (8 + \pi (b - i t)^2) \text{Erfc}\left[\frac{1}{4} \sqrt{\pi} (b - i t)\right] \right)$$

In[]:= LogLinearPlot[R[1, t], {t, 0, 10}]

[representación log lineal



In[]:= LogLinearPlot[Abs[G[0, t]], {t, 0, 10}]

[representación log ... [valor absoluto

