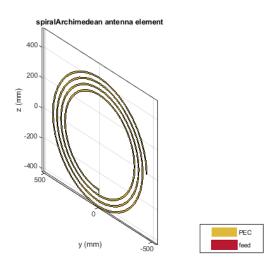
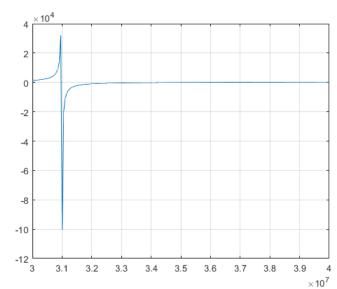
## Respostas dos itens propostos do Projeto

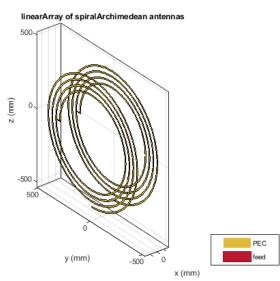
1.



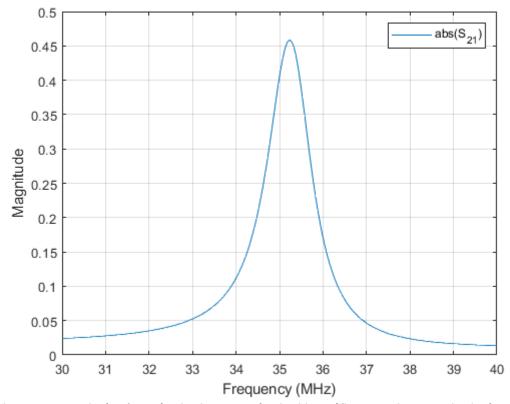
2.



3.

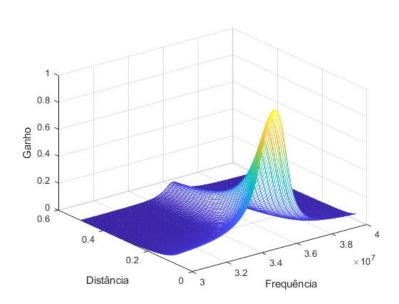


4.

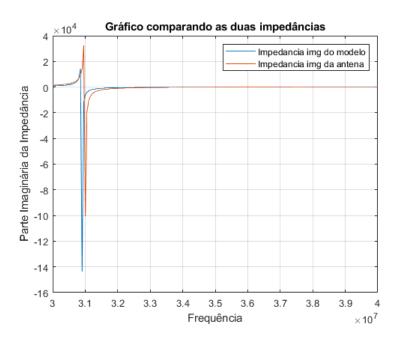


É importante pois é a frequência de ressonância. No gráfico a maior magnitude é a que tem frequência parecido com a de ressonância

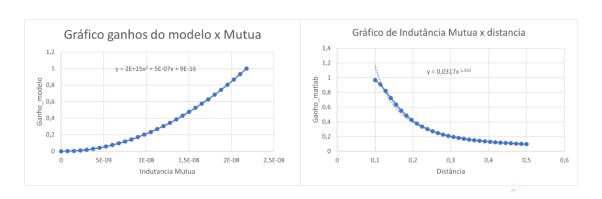
6.



8.



Resposta do M em função de d:



$$0.0317 \cdot d^{-1.563} = 2 \cdot 10^{15} \cdot M^2 + 5 \cdot 10^{-7} \cdot M + 9 \cdot 10^{-16}$$

$$\begin{split} \Delta &= (5 \cdot 10^{-7})^2 - 4 \cdot 2 \cdot 10^{15} \cdot (9 \cdot 10^{-16} - 0,0317 \cdot d^{-1,563}) \\ \Delta &= -7,2 + 2,536 \cdot 10^{14} \cdot d^{-1,563} \end{split}$$

$$\mathrm{M} = \frac{-5 \cdot 10^{-7} + \sqrt{-7,2 + 2,536 \cdot 10^{14} \cdot d^{-1,563}}}{4 \cdot 10^{15}}$$