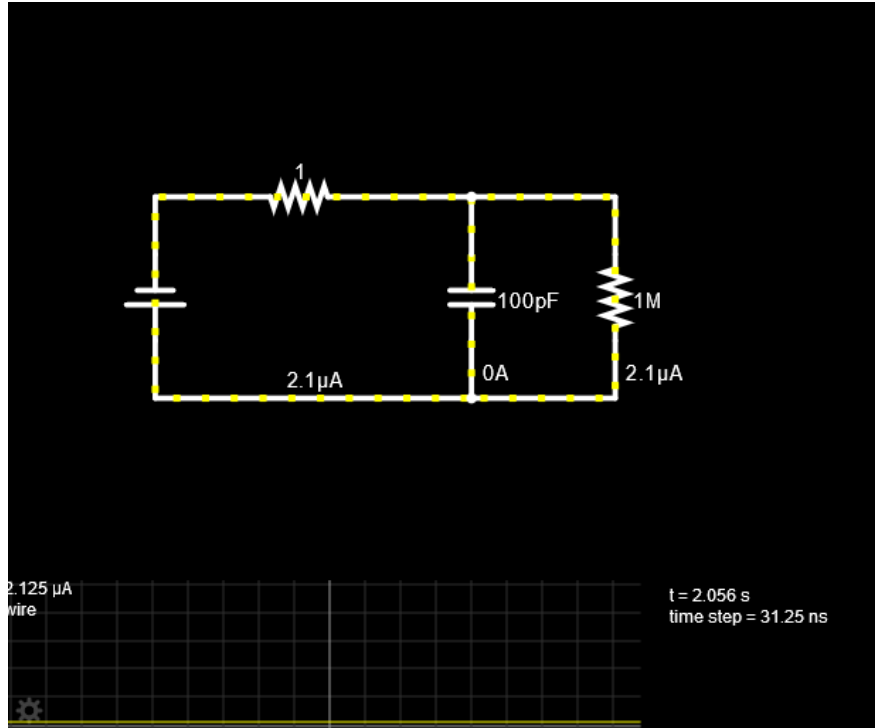
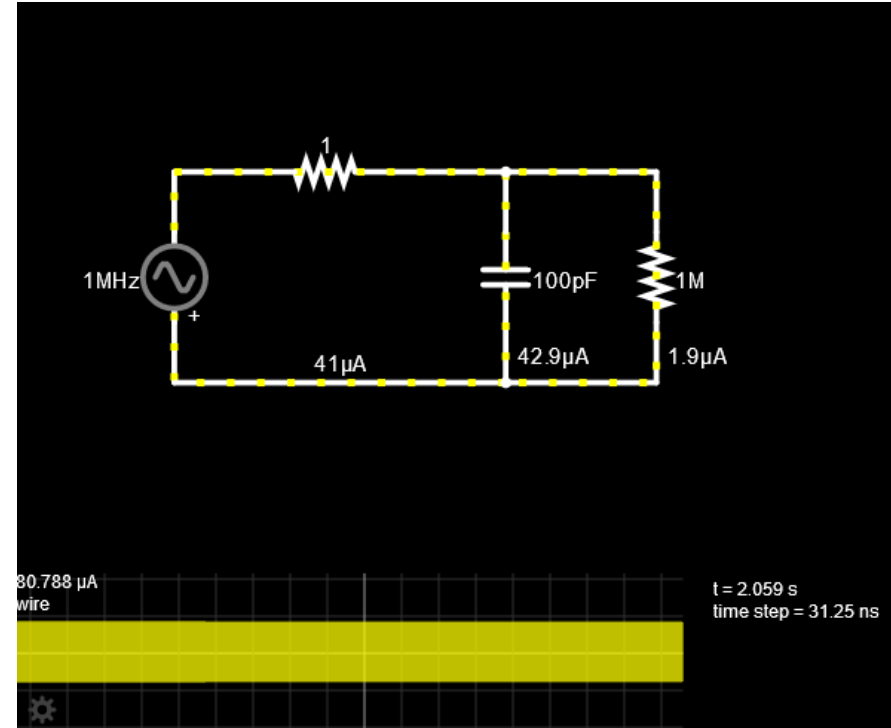


Circuit simulation



DC simulation, current at -2V is $2.1\mu\text{A}$



AC simulation, peak current at -2V is $81\mu\text{A}$ with 125mV 1MHz oscillation

Conclusion: Even if measured DC dark current is $<10\mu\text{A}$, AC current can be $\sim 100\mu\text{A}$ and this is what is measured on the MFIA lock-in current meter