

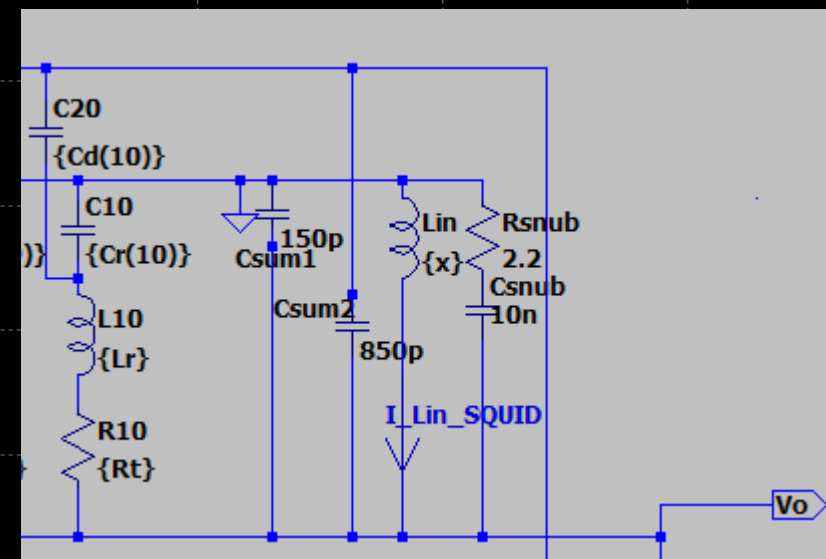
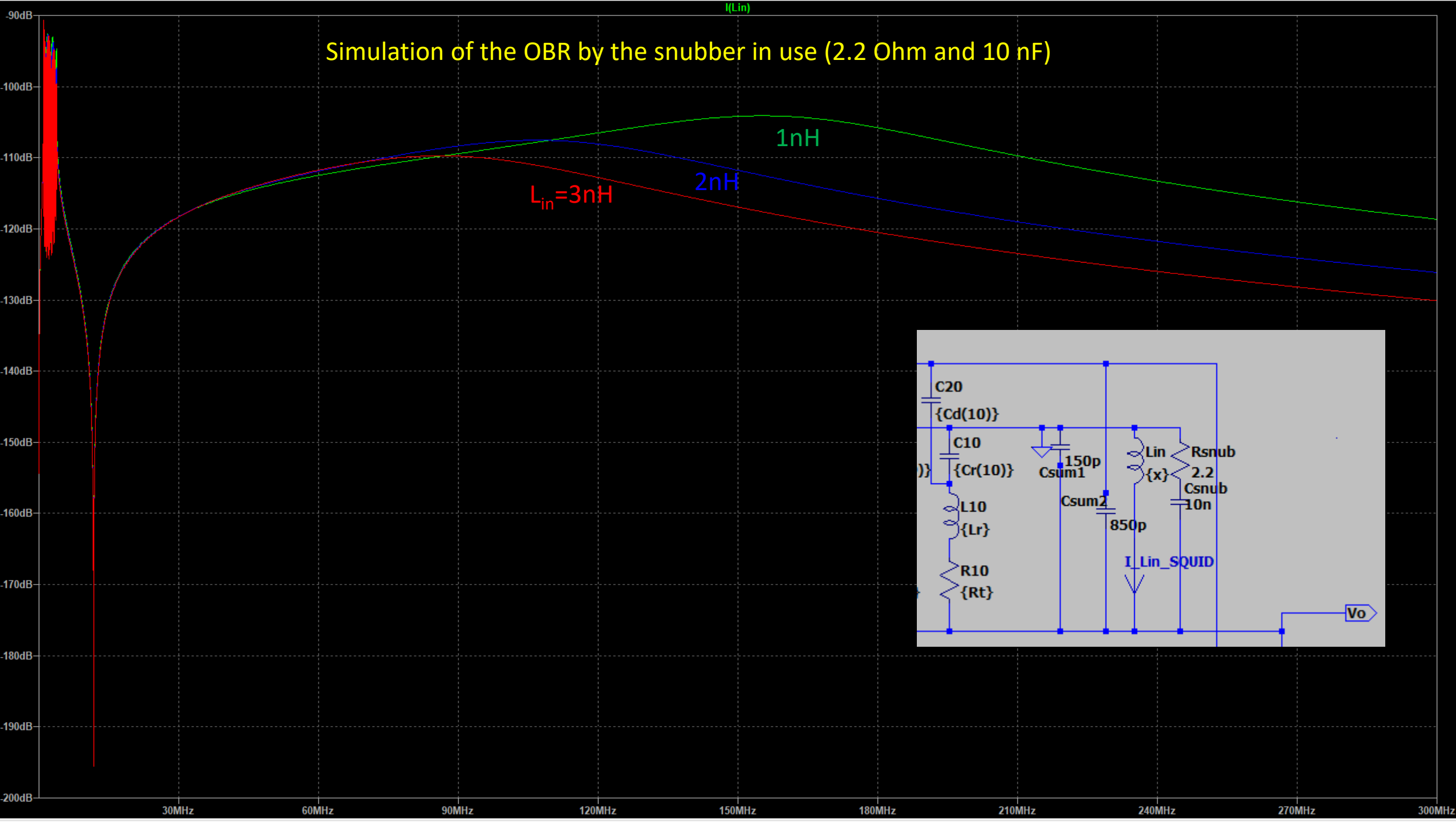
Revisiting the Out of Band Resonances (OBR) of the SAFARI FDM- 2-stage SQUID

- A SQUID with lower L_{in} shifts away the OBR to the higher frequencies
- The snubber in use still damps down the OBR peak although it can be optimized for the new SQUID
- A nearby OBR could also occur which depends on the Loom-in characteristics. It won't be damped by the snubber at the summing point

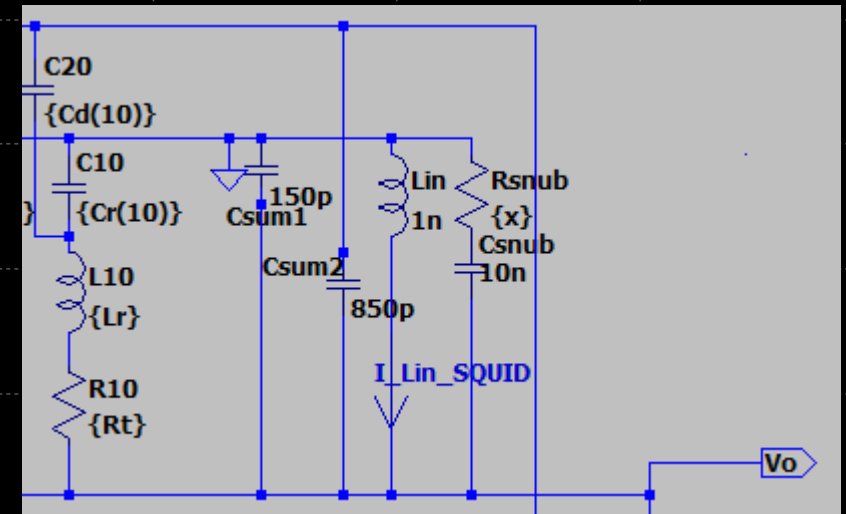
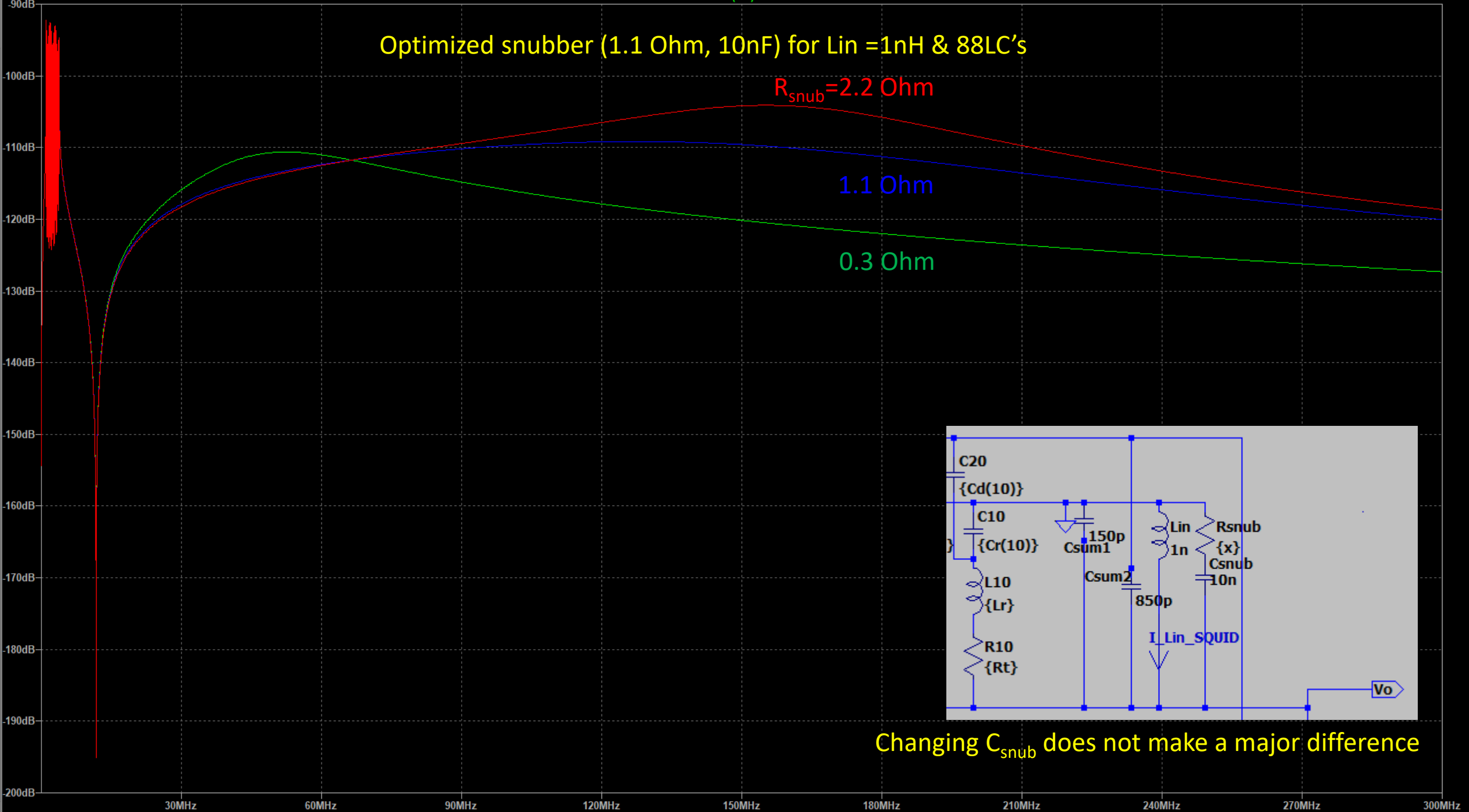
Simulation and Modeling using LTspiceXVII

Amin Aminaei, February 2020

Simulation of the OBR by the snubber in use (2.2 Ohm and 10 nF)



Optimized snubber (1.1 Ohm, 10nF) for $L_{in} = 1nH$ & 88LC's



Changing C_{snub} does not make a major difference

88 Pixels, Lin 1nH,2nH,3nH

