Chebyshev filter

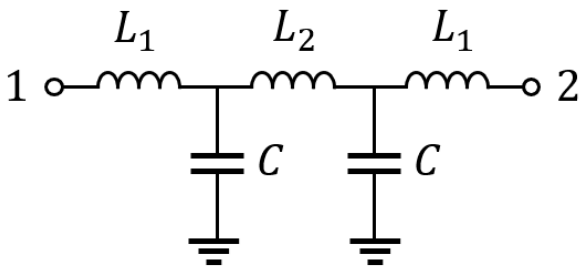

Figure 1. Schematic of circuit we want to create.

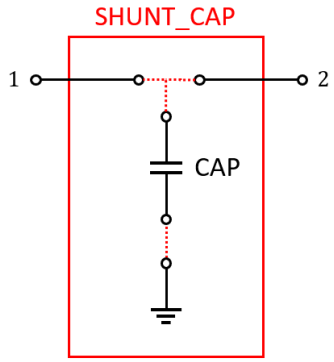

Figure 2. Creating shunt cap subnetwork.

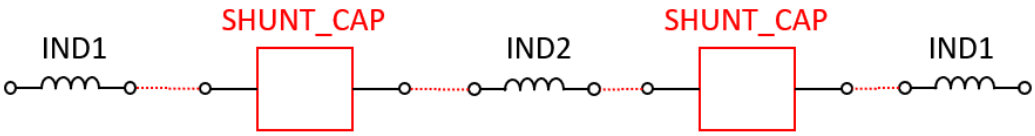

Figure 3. The final network

```
clear
SI_units

crt = FloquetCircuit();
crt.freq = linspace(0.001,3,300)*GHz;

add_capacitor(crt, 'CAP', 3.262*pF);
add_inductor(crt, 'IND1', 11.311*nH);
add_inductor(crt, 'IND2', 16.853*nH);


% Rather than using connect_by_ports() function, there are a few functions which connect
% the blocks in a certain fashion. You can find them in toolbox/connections/ folder

% Here, we first create a shunt capacitor network, as is shown in Figure 2 using the
% function make_shunt_T()
make_shunt_T(crt, 'SHUNT_CAP', {'CAP'});

% Next, we use connect_is_series() to assemble the final 2-port circuit
connect_in_series(crt, 'CHEBFILTER', {'IND1','SHUNT_CAP','IND2','SHUNT_CAP','IND1'})

crt.analyze();

figure
plot_sparam_mag(crt,'CHEBFILTER', 'XUnits', 'GHz', 'YUnits', 'dB');
```