编辑公式将S参数转为RLC

Ansys

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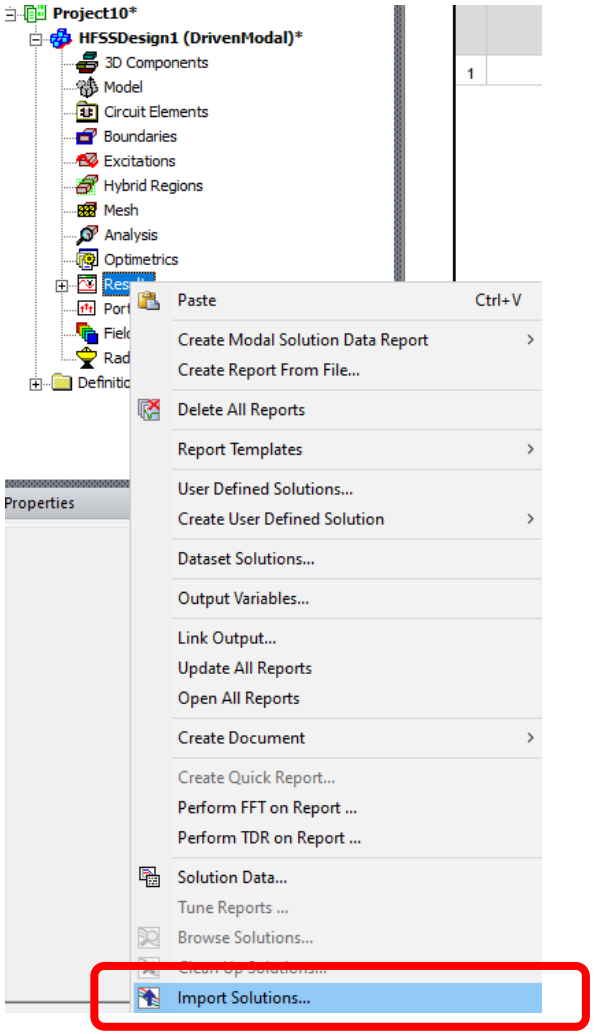
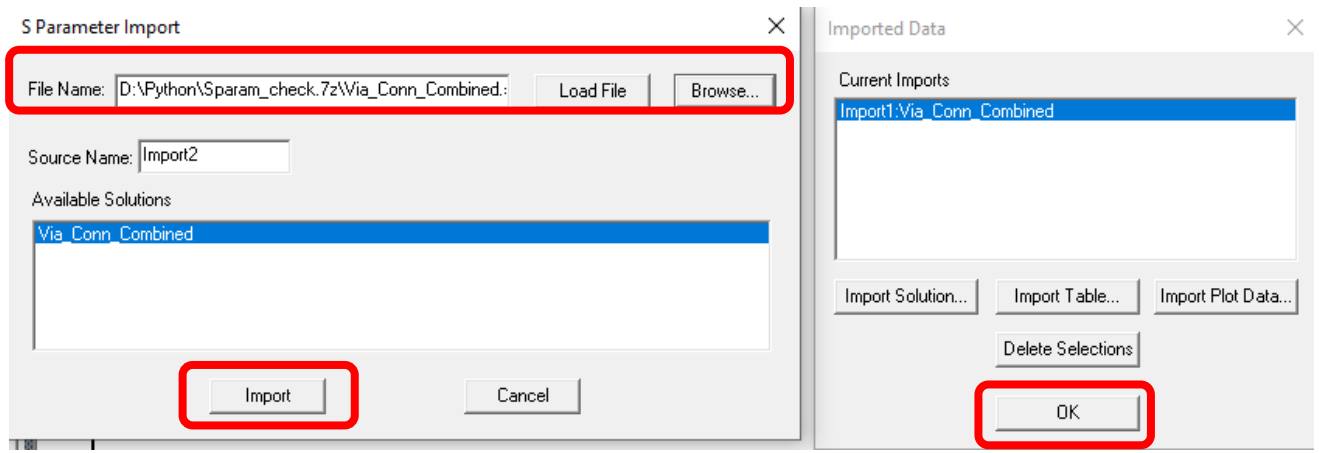
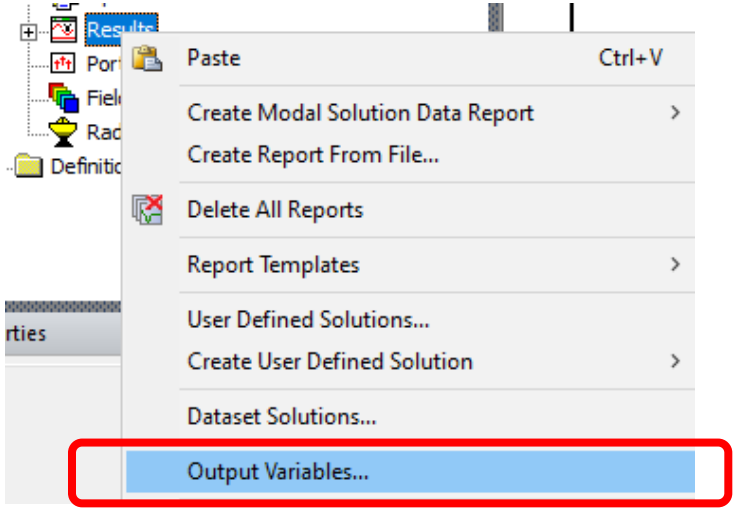
Step1, 新建HFSS工程（空的工程）， Import Solution导入S参数





Step2, Results中右键选择Output Variables



Below equations are used for computing RLGC sub-cricuit values:

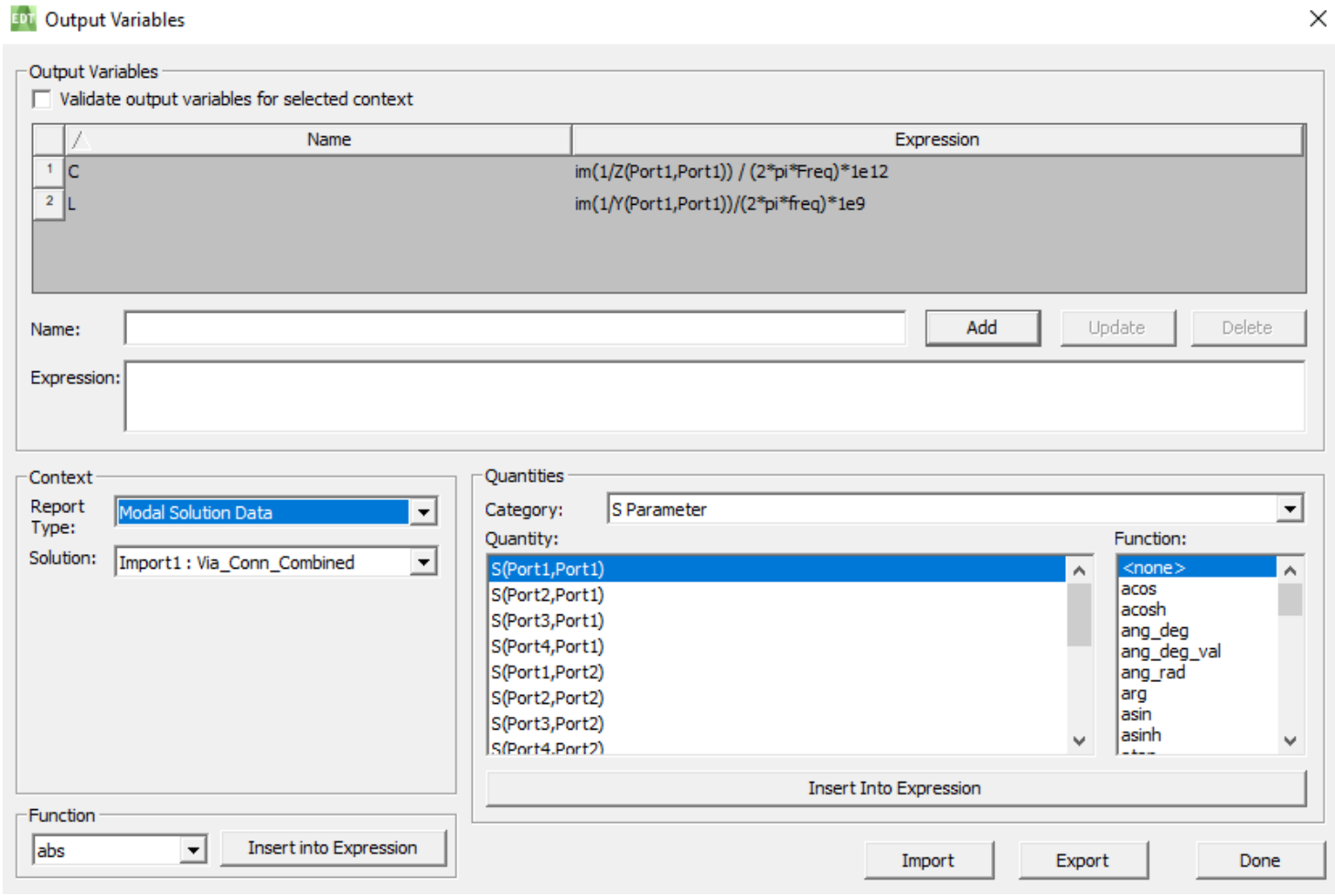
L = im(1/Y(1,1)) / (2*pi*F) * 1e9 (in nH)

R = re(1/Y(1,1)) (in Ohms)

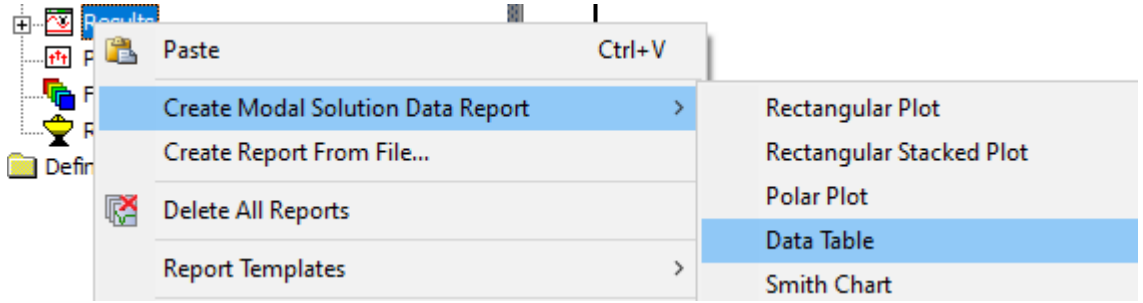
C = im(1/Z(1,1)) / (2*pi*F) * 1e12 (in pF)

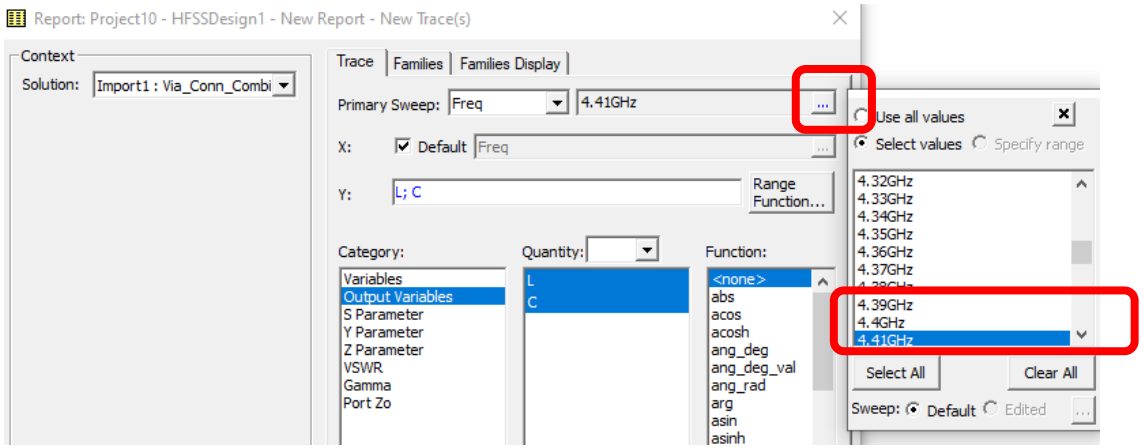
G = re(1/Z(1,1)) *1e3 (in mS)

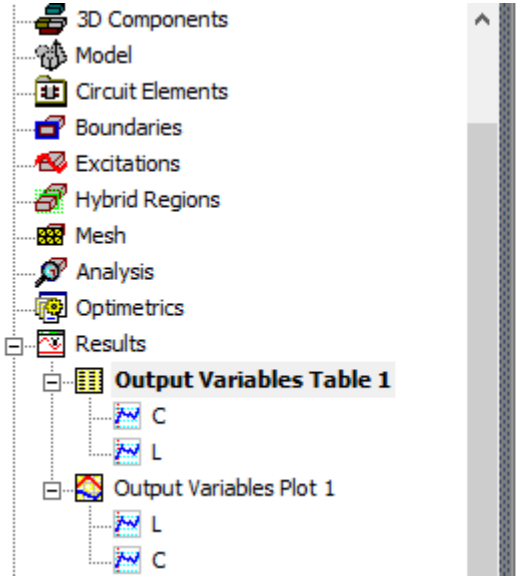
Step3, 编辑公式



Step4, 查看结果：选择Data Table，或者Plot，选择需要的频率点

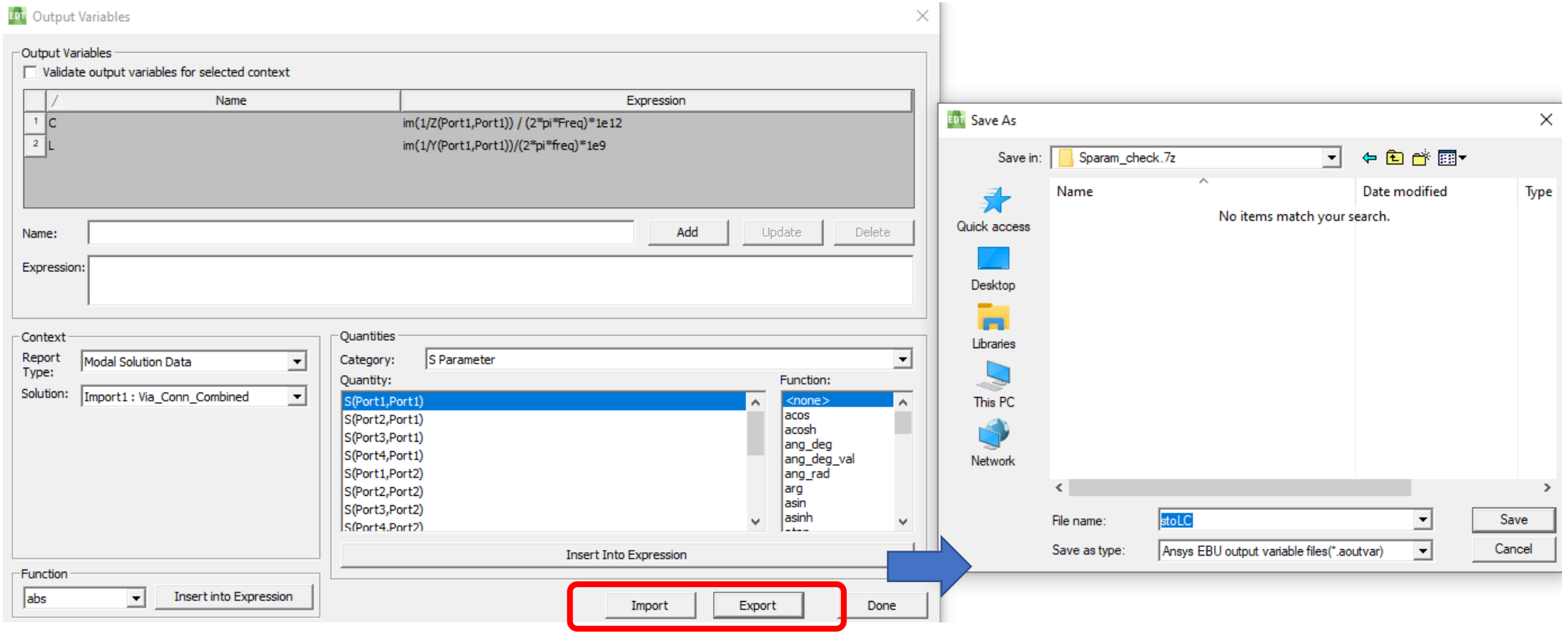






	Freq [GHz]	C Import1 : Via_Conn_Combined	L Import1 : Via_Conn_Combined
1	1.000000	1.984878	5.279722

Step5, Export公式，方便下次直接Import




```
L1 'im(1/Y(Port1,Port1))/(2*pi*freq)*1e9' Double '' dBTypeDoesntCare
C1 'im(1/Z(Port1,Port1)) / (2*pi*Freq)*1e12' Double '' dBTypeDoesntCare
L2 'im(1/Y(Port2,Port2))/(2*pi*freq)*1e9' Double '' dBTypeDoesntCare
C2 'im(1/Z(Port2,Port2)) / (2*pi*Freq)*1e12' Double '' dBTypeDoesntCare
```

可以直接在保存的公式文档中直接文本复制和修改，来增加多个Port