

ECE 6370: Homework 8, Additional Screenshots

Caitlyn Caggia

Problem 1 NEC Input File

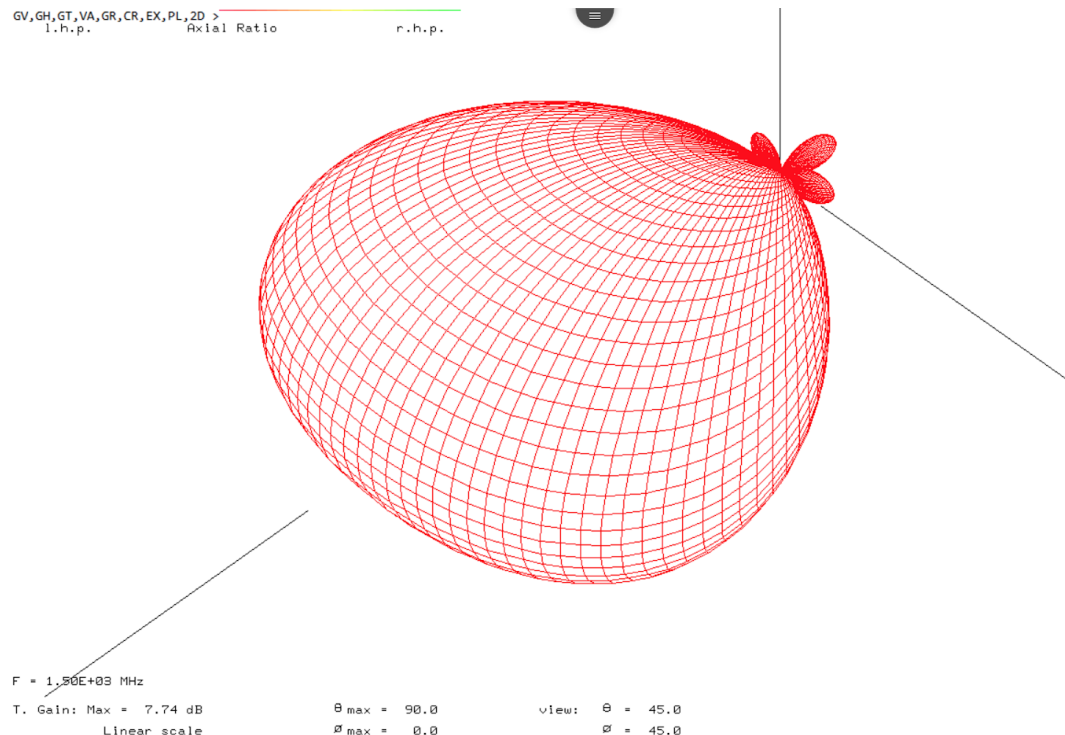
```
1 CM ECE 6370 - Homework 8.1
2 CM Caitlyn Caggia
3 CE Calculation 1
4 GW 1 11 -0.075 0. -0.05 -0.075. 0. 0.05 0.00025
5 GW 2 11 0. 0. -0.05 0. 0. 0.05 0.00025
6 GW 3 11 0.075 0. -0.05 0.075 0. 0.05 0.00025
7 GE
8 EX 0 1 6 0 1.0 0
9 FR 0 1 0 0 1500. 0.
10 RP 0 1 0 1000 0. 0. 0. 0.
11 EN
```

To get calculations 1-3, the 2nd term on line 8 was changed from 1-3.

Problem 5 NEC Input File

```
1 CM ECE 6370 - Homework 8.5
2 CE Caitlyn Caggia
3 GW 1 11 -0.075 0. -0.05 -0.075. 0. 0.05 0.00025
4 GW 2 11 0. 0. -0.05 0. 0. 0.05 0.00025
5 GW 3 11 0.075 0. -0.05 0.075 0. 0.05 0.00025
6 GE
7 EX 0 1 6 0 3.28333 4.95580
8 EX 0 2 6 0 3.10466 -13.14395
9 EX 0 3 6 0 -11.27266 12.19128
10 FR 0 1 0 0 1500. 0.
11 RP 0 181 91 1000 0. 0. 2 2
12 EN
```

Problem 5 3D Plot

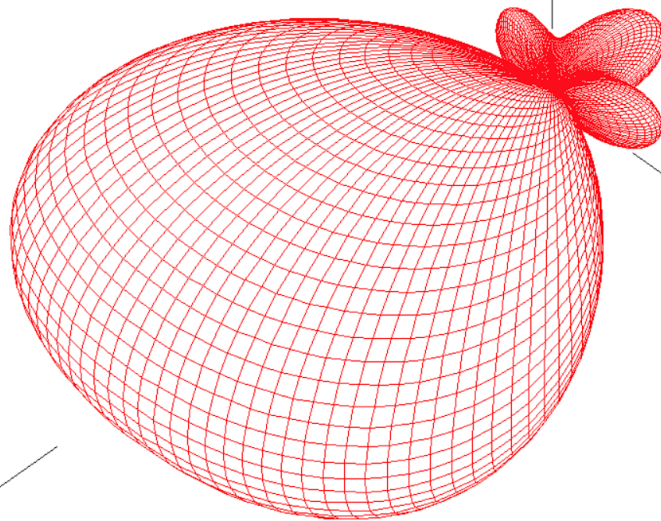


Problem 6 NEC Input File

```
1 CM ECE 6370 - Homework 8.6
2 CE Caitlyn Caggia
3 GW 1 11 -0.075 0. -0.05 -0.075. 0. 0.05 0.00025
4 GW 2 11 0. 0. -0.05 0. 0. 0.05 0.00025
5 GW 3 11 0.075 0. -0.05 0.075 0. 0.05 0.00025
6 GE
7 EX 0 1 6 0 8.35839 4.92000
8 EX 0 2 6 0 -2.29101 -9.50497
9 EX 0 3 6 0 -4.92000 8.35839
10 FR 0 1 0 0 1500. 0.
11 RP 0 181 91 1000 0. 0. 2 2
12 EN
```

Problem 6 3D Plot

GV, GH, GT, VA, GR, CR, EX, PL, 2D >
l.h.p. Axial Ratio r.h.p.



F = 1.50E+03 MHz

T. Gain: Max = 6.97 dB
Linear scale

$\theta_{max} = 90.0$
 $\phi_{max} = 0.0$

view: $\theta = 45.0$
 $\phi = 45.0$