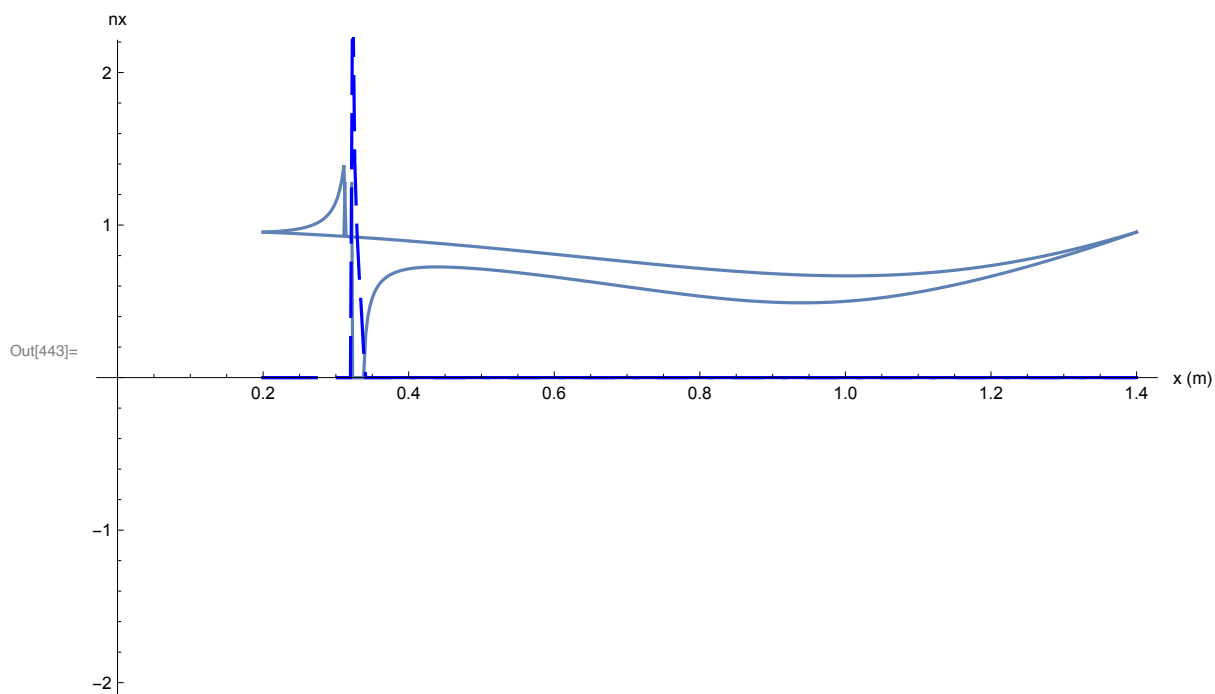


90GHz ECH with Parabolic/Solovev Profiles

Open Additional files:

Case 1

Plot Real and Imaginary parts of nx^2 from 4nd order cold plasma dispersion relation (Plus and Minus roots)



```
dataSet=Slab 90HHz
```

```
n0=5. × 1019
```

```
b0=1.
```

```
freq=90 000
```

```
rMaj=1.
```

```
rOut=1.4
```

```
κ=1.1
```

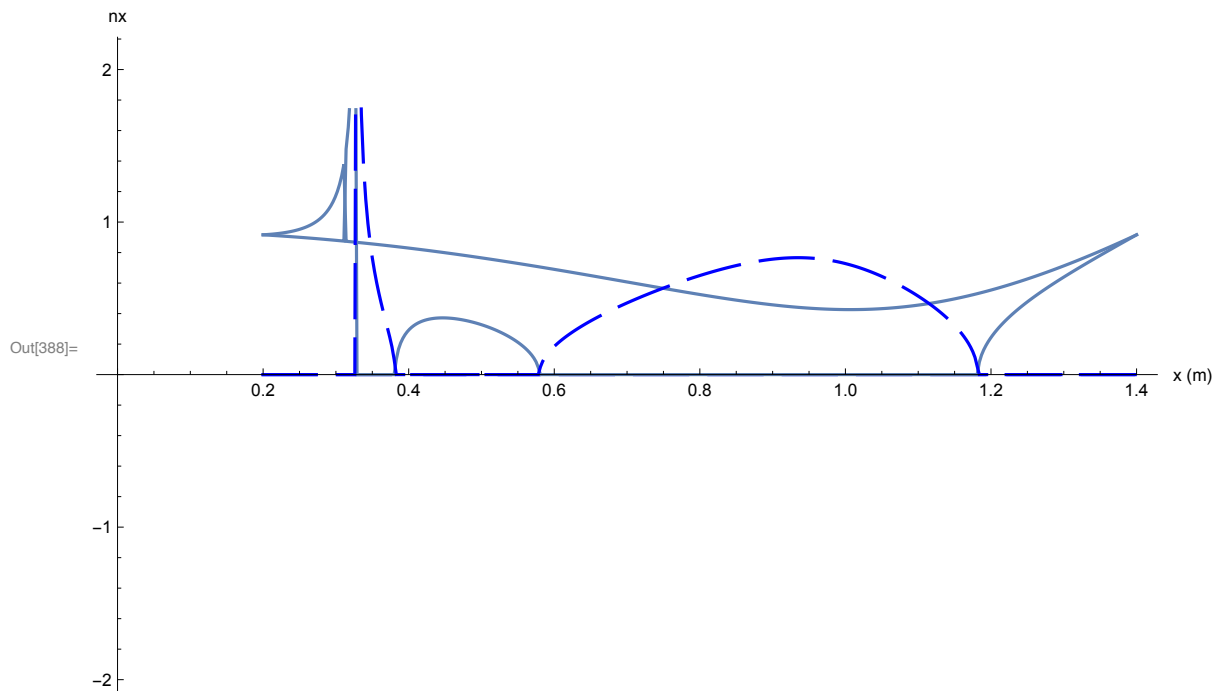
```

L0=0.00001
α1=1.
α2=1.
αT1=1.
αT2=2.
t0=1.
nz=0.3
etaList={0., 1., 0., 0., 0.}
xmin=0.2
xmax=1.4
nPerp2FS[x_]

```

Case 2

Plot Real and Imaginary parts of nx^2 from 4nd order cold plasma dispersion relation (Plus and Minus roots)



```

dataSet=Slab 90HHz
n0= $7.5 \times 10^{19}$ 
b0=1.
freq=90000

```

```

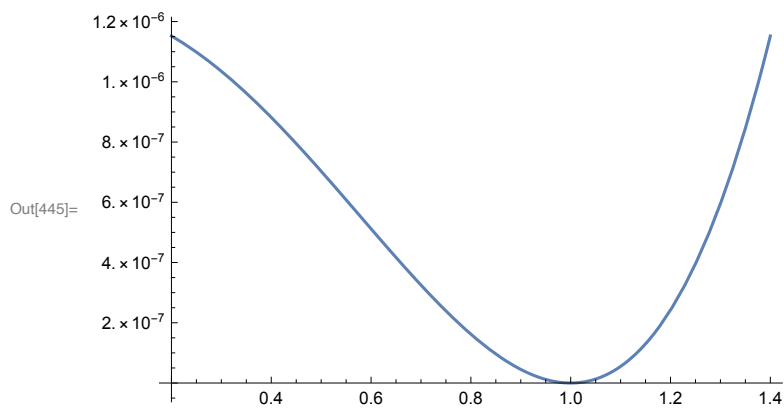
rMaj=1.
rOut=1.4
κ=1.1
ι0=0.00001
α1=1.
α2=1.
αT1=1.
αT2=2.
t0=1.
nz=0.4
etaList={0., 1., 0., 0., 0.}
xmin=0.2
xmax=1.4

nPerp2FS[x_]

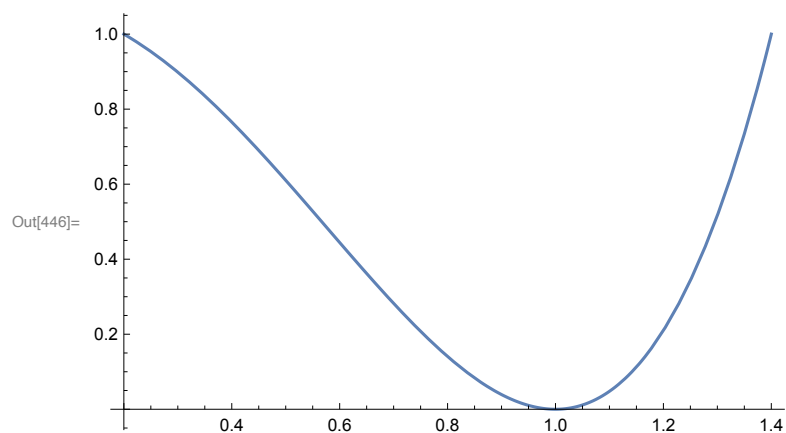
```

Plot Profiles

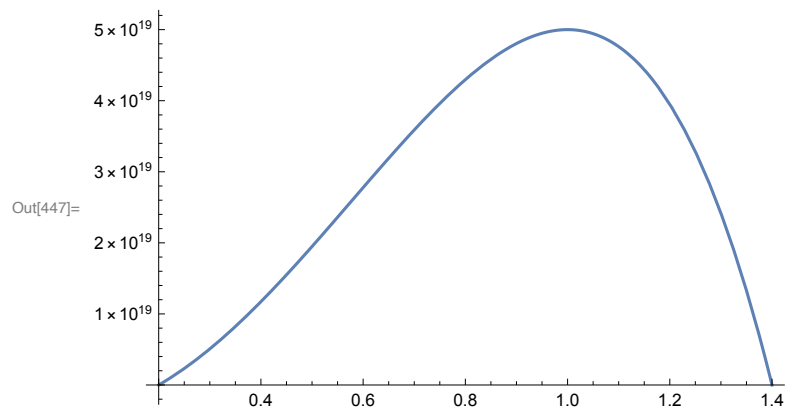
In[445]:= **Plot**[$\psi[x, 0., rMaj, b0, \iota0, \kappa]$, {x, xmin, xmax}]



In[446]:= `Plot[ψN[x, 0., rMaj, rOut, b0, ℓ0, κ], {x, xmin, xmax}]`



In[447]:= `Plot[nprof[x], {x, xmin, xmax}]`



In[448]:= `Plot[bprof[x], {x, xmin, xmax}]`

