

quarter_inch_DEE_gap lawrence.am

Electrostatic Problem of Cyclotron chamber at Peak High Voltage.

Mainly used for studying the ion source region

DEE Voltage: 10kV

[April 25, 2005 - Tim Koeth]

```
&reg kprob=0,      ! Poisson or Pandira problem
xjfact=0.0,       ! Electrostatic problem
dx=0.03,         ! Mesh interval
icylin=0,        ! Cartesian coordinates
nbsup=0,         ! Dirichlet boundary condition at upper edge
nbslo=0,         ! Dirichlet boundary condition at lower edge
nbsrt=0,         ! Dirichlet boundary condition at right edge
nbslf=0,         ! Dirichlet boundary condition at left edge
ltop=10 &        ! Maximum row number for field interpolation
```

```
&po x=-14., y= 1.3 & !this outlines the grounded chamber with new dummy DEE
&po x= 0.318, y= 1.3 &
&po x= 0.318, y= 0.4 &
&po x= 1.270, y= 0.4 &
&po x= 1.270, y= 1.3 &
&po x= 14., y= 1.3 &
&po x= 14., y=-1.3 &
&po x= 1.270, y=-1.3 &
&po x= 1.270, y=-0.4 &
&po x= 0.318, y=-0.4 &
&po x= 0.318, y=-1.3 &
&po x=-14., y=-1.3 &
&po x=-14., y= 1.3 &
```

```
&reg mat=0,voltage=4000.0,ibound=-1 & ! this outlines the DEE (at widest - symmetry
- point) 10kV
&po x=-13.2,y= 0.5 &
&po x= -0.125,y= 0.5 &
&po x= -0.125,y= 0.4 &
&po x=-13.041,y= 0.4 &
&po x=-13.041,y=-0.4 &
&po x= -0.125,y=-0.4 &
&po x= -0.125,y=-0.5 &
&po x=-13.2,y=-0.5 &
&po x=-13.2,y= 0.5 &
```