Problem info

Problem type: Electrostatics
Geometry model class: Axisymmetric
Problem database file names:

- Problem: *pair_of_coaxial_disks.pbm*
- Geometry: *Pair_of_coaxial_disks.mod*
- Material Data: *Pair_of_coaxial_disks.des*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

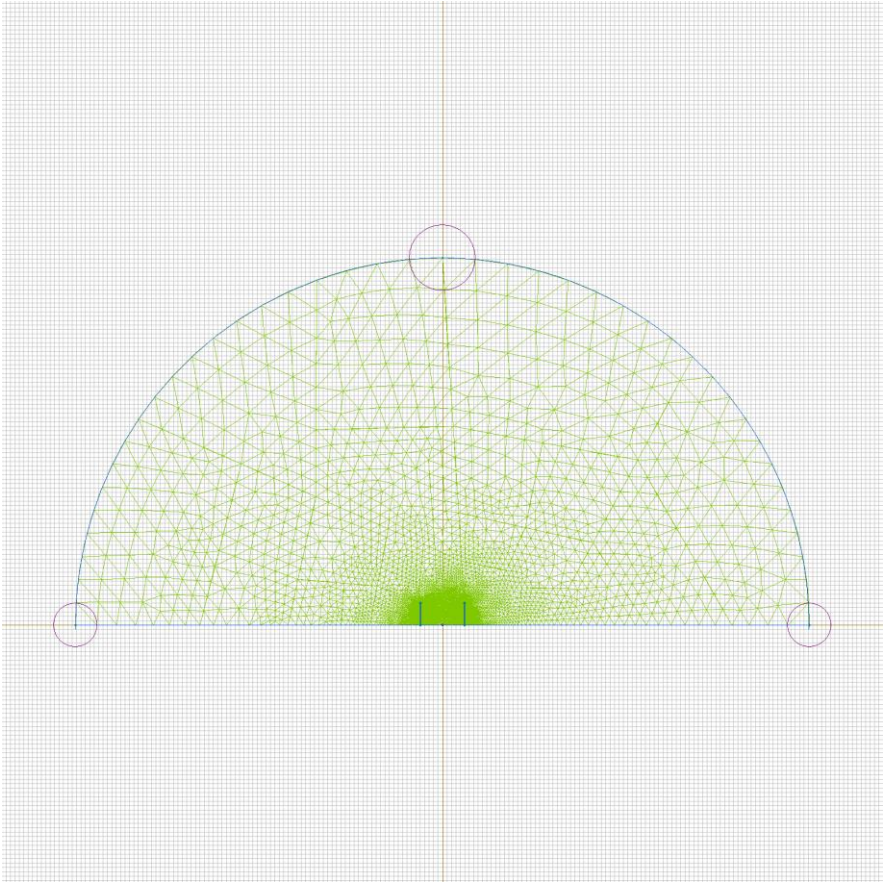


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	3
Edges	3	14
Vertices	2	12

Number of nodes: 37351.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

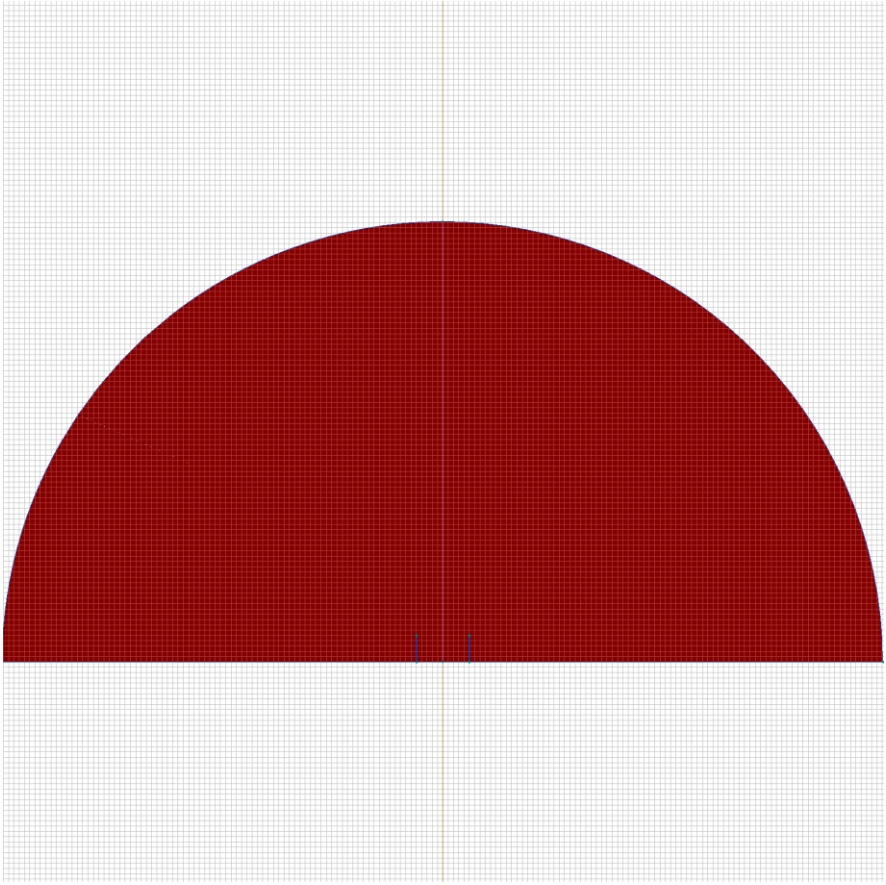
Blocks:	Edges:	Vertices:
• vacuum •	• disc1 • boundary • disc2 •	• charge- • charge+ •

Detailed information about each label is listed below.

Labelled objects: block "vacuum"

There are (1) objects with this label

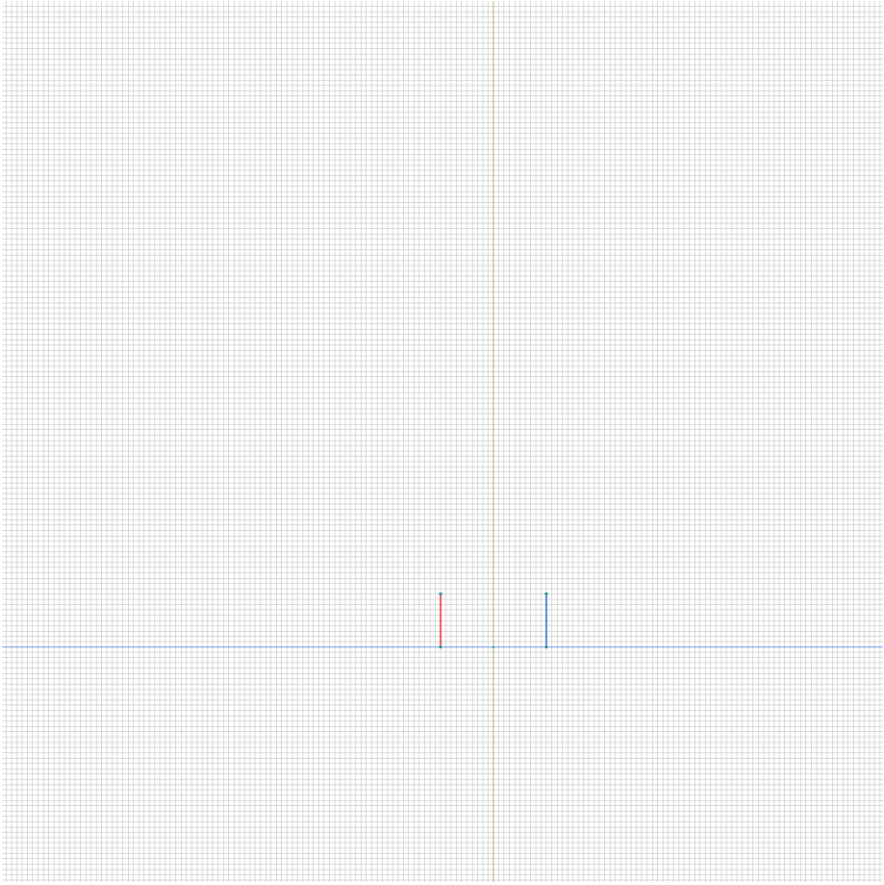
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: edge "disc1"

There are (3) objects with this label

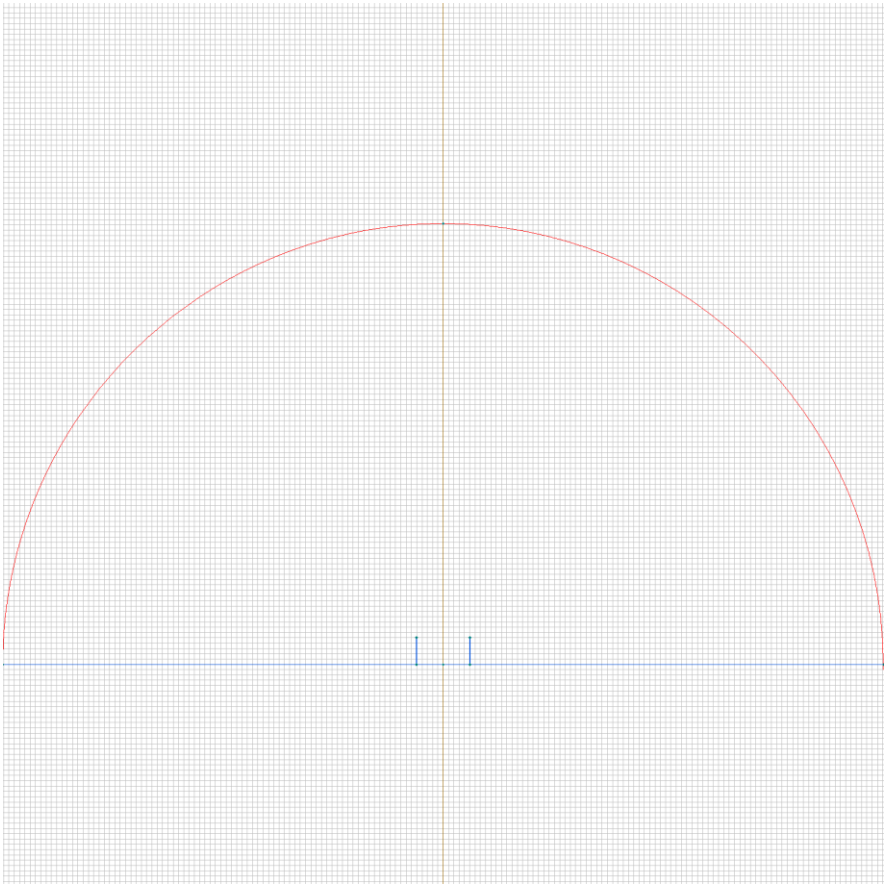
Floating conductor (equal voltage)



Labelled objects: edge "boundary"

There are (2) objects with this label

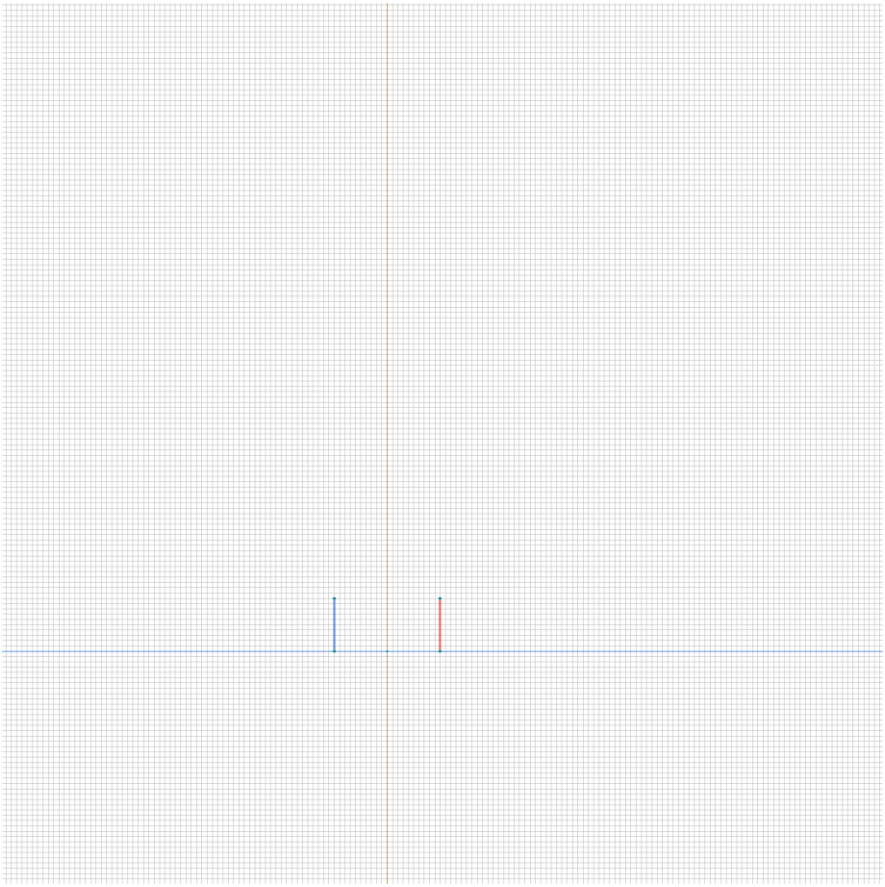
Voltage U=0 [V]



Labelled objects: edge "disc2"

There are (3) objects with this label

Floating conductor (equal voltage)



Labelled objects: vertex "charge-"

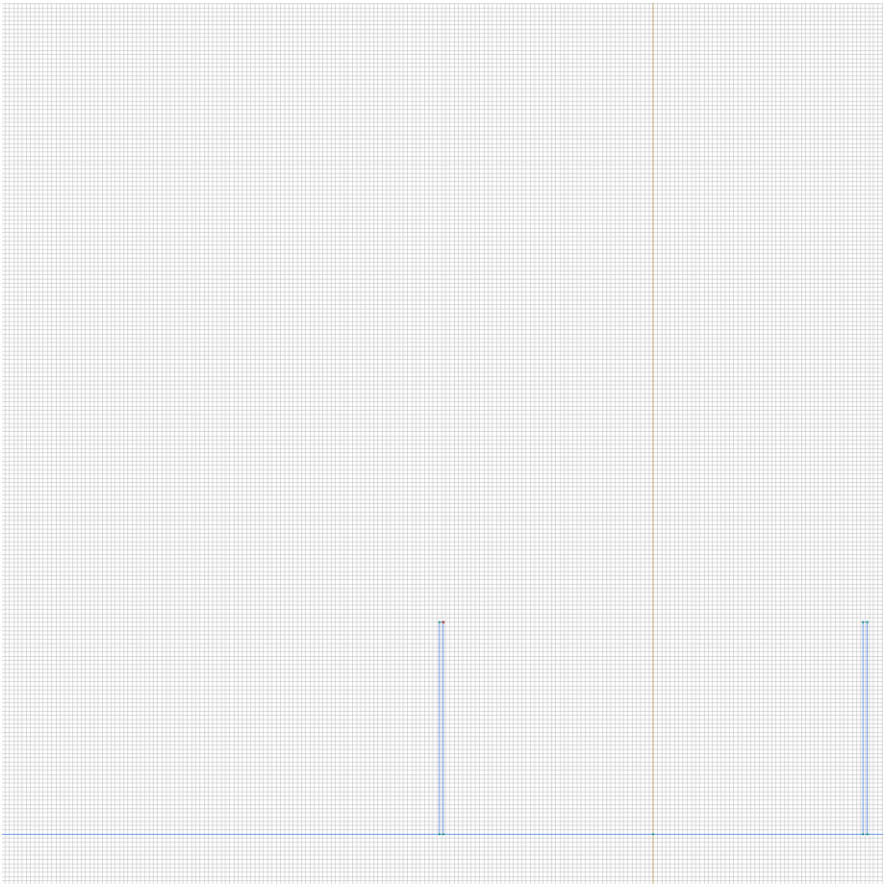
There are (1) objects with this label

Electric charge q=-0.000000001 [C/m]

Labelled objects: vertex "charge+"

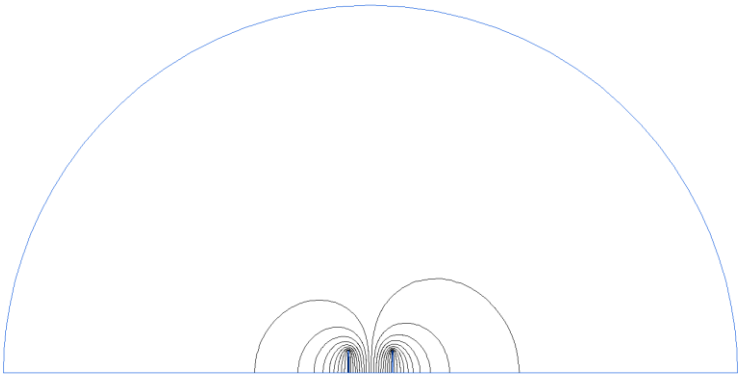
There are (1) objects with this label

Electric charge q=0.000000001 [C/m]



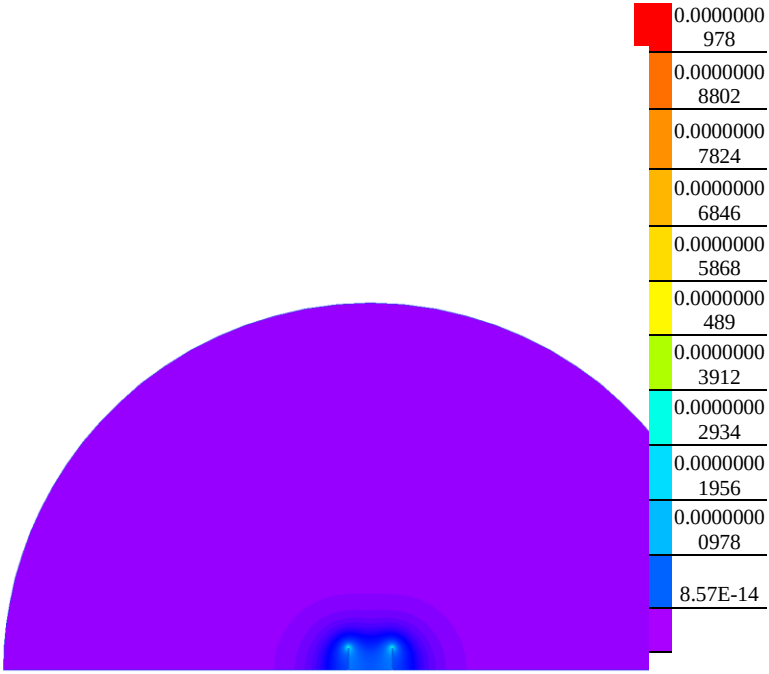
Results

Field lines



Results

Color map of Electric induction |D| [C/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data