

# Problem info

Problem type: Electrostatics

Geometry model class: Plane-Parallel

Problem database file names:

- Problem: *Elec3.pbm*
- Geometry: *Elec3.mod*
- Material Data: *Elec3.des*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

# Geometry model

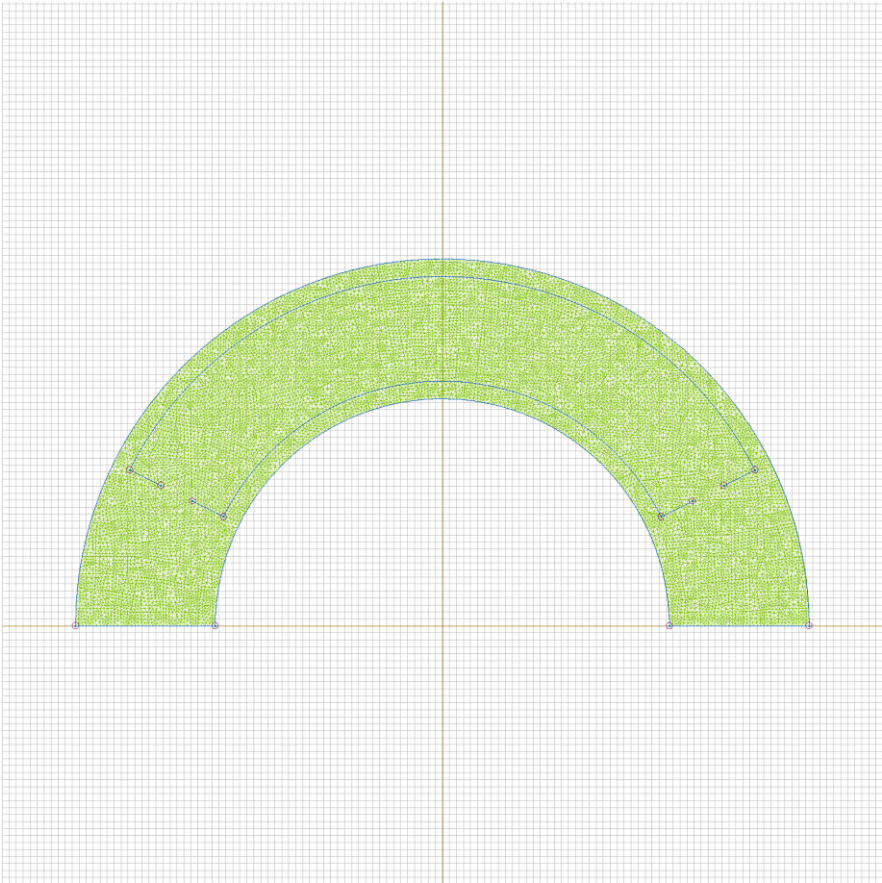


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	1
Edges	3	10
Vertices	0	12

Number of nodes: 12685.

# 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:

- [vacuum](#)
- 

Edges:

- [V-](#)
- [V+](#)
- [V0](#)
- 

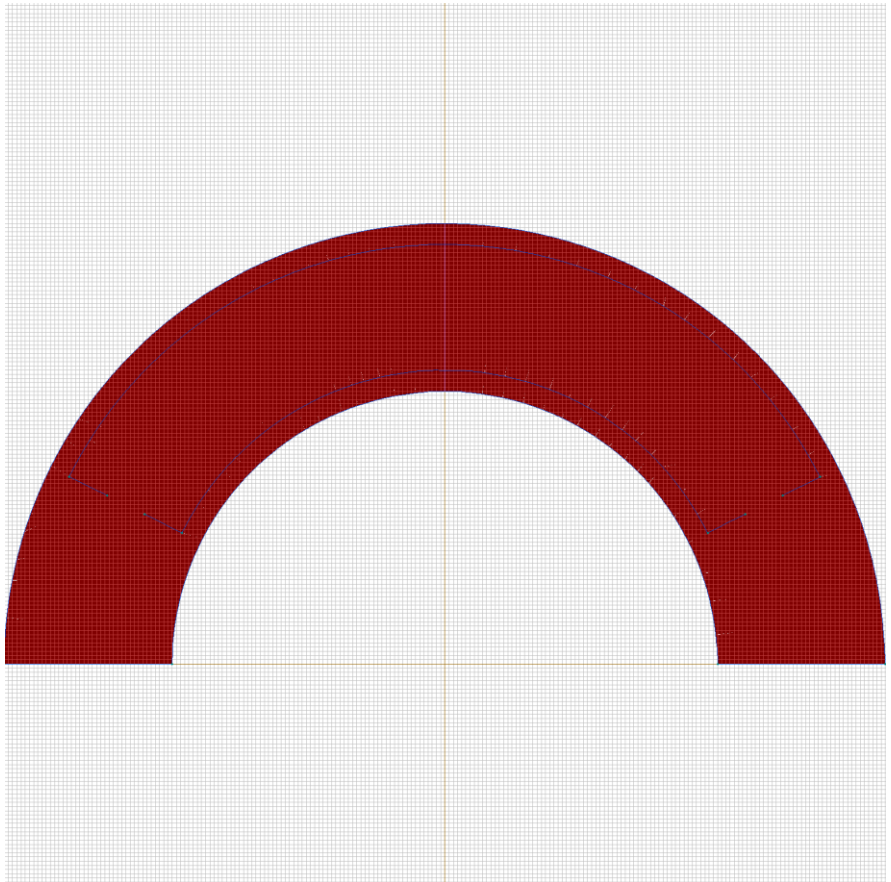
Vertices:

Detailed information about each label is listed below.

Labelled objects: block "vacuum"

There are (1) objects with this label

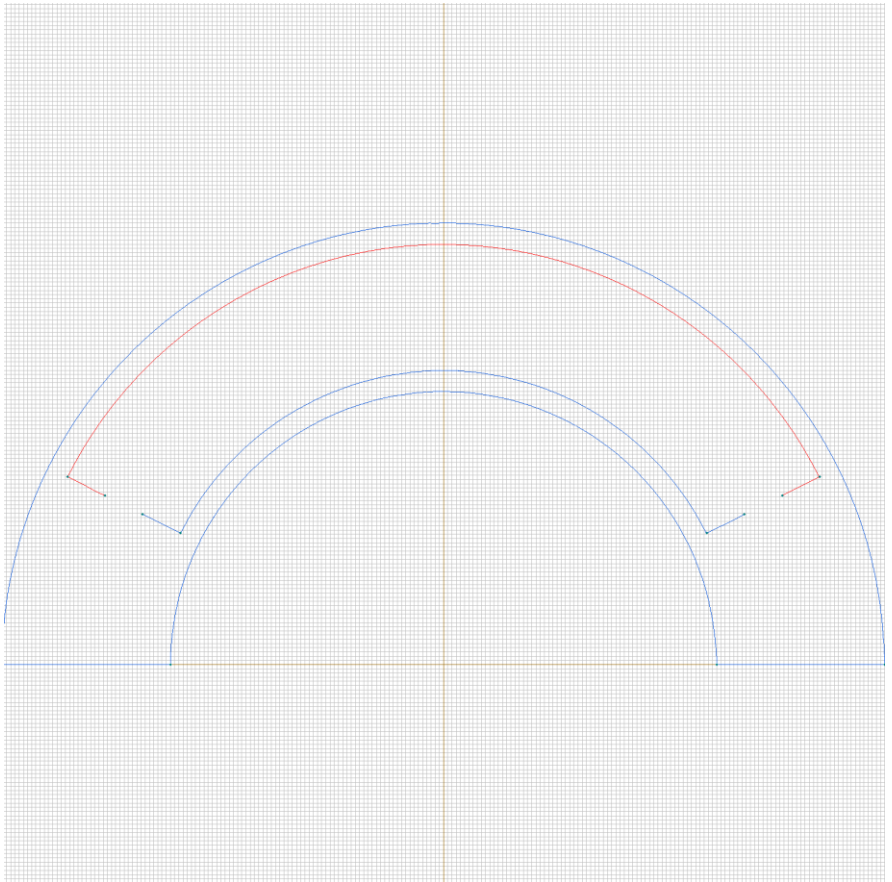
Relative electric permittivity  $\epsilon_{x=1}$ ,  $\epsilon_{y=1}$



Labelled objects: edge "V-"

There are (3) objects with this label

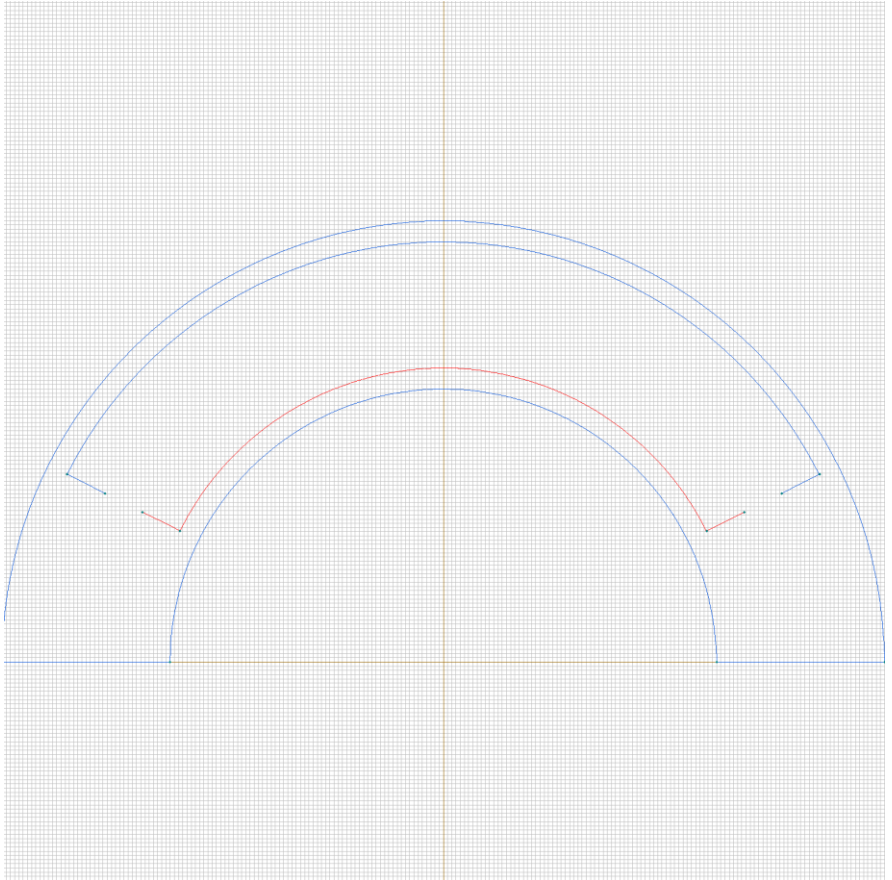
Voltage  $U = -500$  [V]



Labelled objects: edge "V+"

There are (3) objects with this label

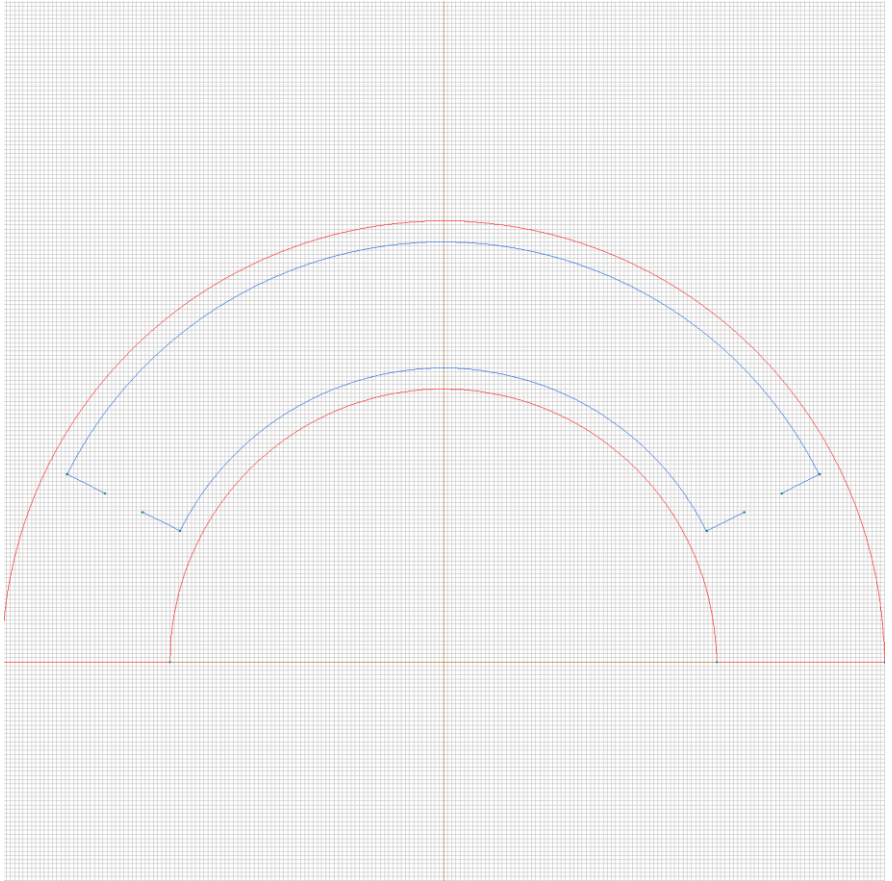
Voltage  $U=500$  [V]



## Labelled objects: edge "V0"

There are (4) objects with this label

Voltage  $U=0$  [V]

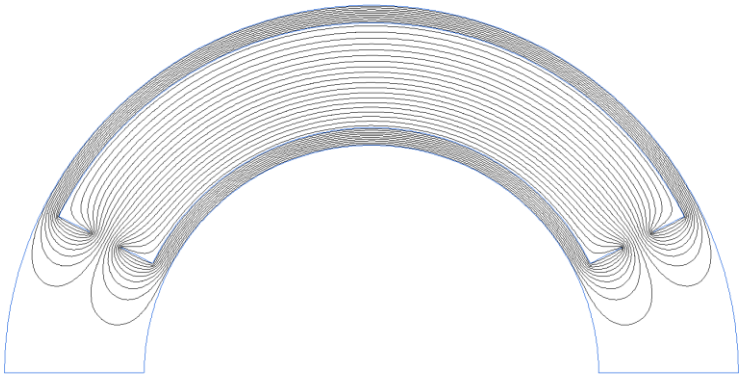






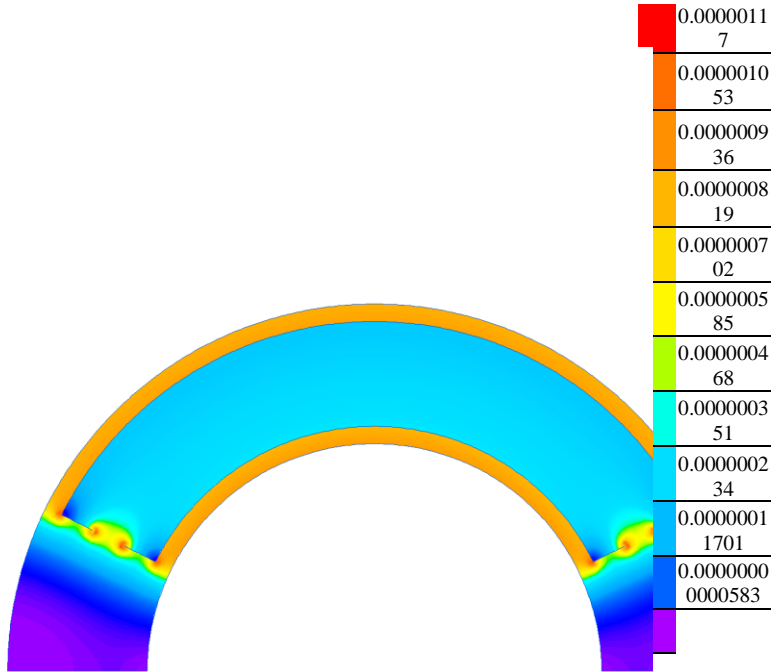
# Results

Field lines



# Results

Color map of Electric induction  $|D|$  [C/m<sup>2</sup>]



# Nonlinear dependencies

No non-linear dependencies are used in this problem data