Problem info

Problem type: Electrostatics

Geometry model class: Axisymmetric

Problem database file names:

• Problem: rogowski.pbm

• Geometry: Rogowski.mod

• Material Data: Rogowski.des

• Material Data 2 (library): none

• Electric circuit: none

Results taken from other problems:

none

Geometry model

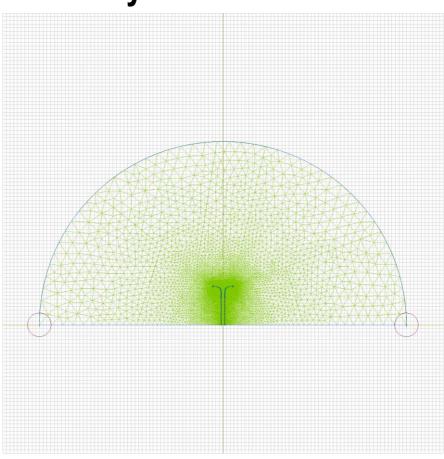


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	1
Edges	4	78
Vertices	0	78

Number of nodes: 45885.

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)

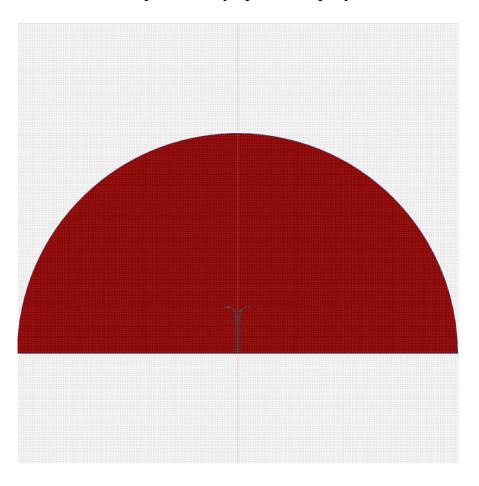
Blocks:	Edges:	Vertices:
• <u>air</u>	• <u>U-</u>	
•	• <u>U+</u>	
	• <u>axis</u>	
	• <u>boundary</u>	
	•	

Detailed information about each label is listed below.

Labelled objects: block "air"

There are (1) objects with this label

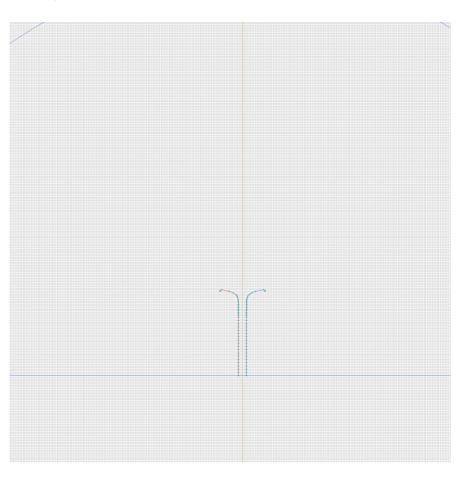
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: edge "U-"

There are (37) objects with this label

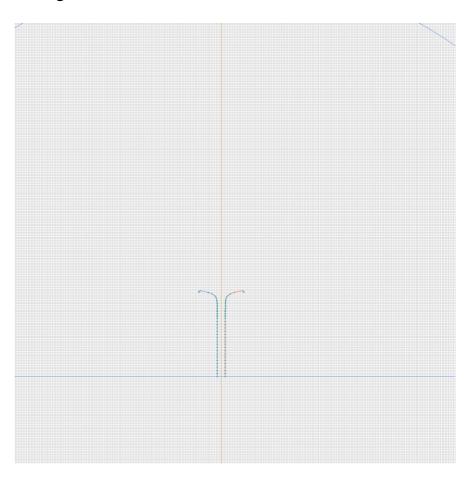
Voltage U=-1000 [V]



Labelled objects: edge "U+"

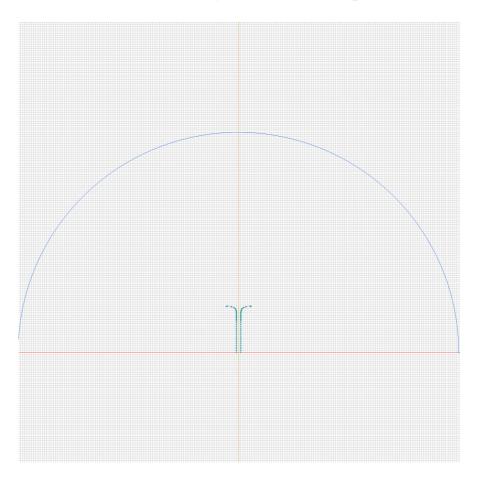
There are (37) objects with this label

Voltage U=1000 [V]



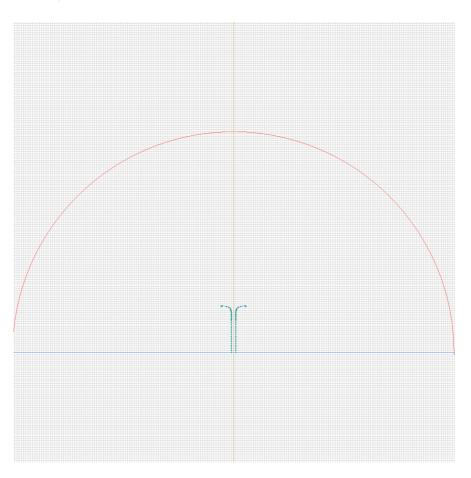
Labelled objects: edge "axis"
There are (3) objects with this label

No material data (boundary conditions) are specified



Labelled objects: edge "boundary" There are (1) objects with this label

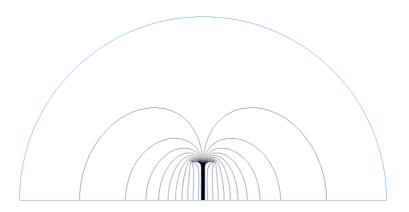
Voltage U=0 [V]



<u>Problem info</u> <u>Geometry model</u> <u>Labelled Objects</u> <u>Results</u> <u>Nonlinear dependencies</u>

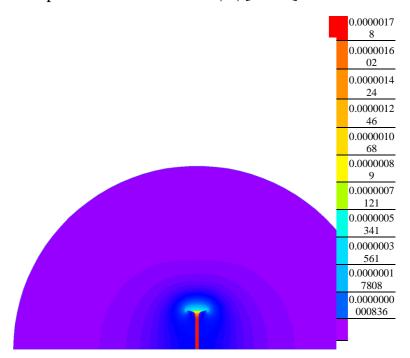
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data