Problem info

Problem type: Electrostatics
Geometry model class: Plane-Parallel
Problem database file names:

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

Results taken from other problems:

- *none*

Geometry model

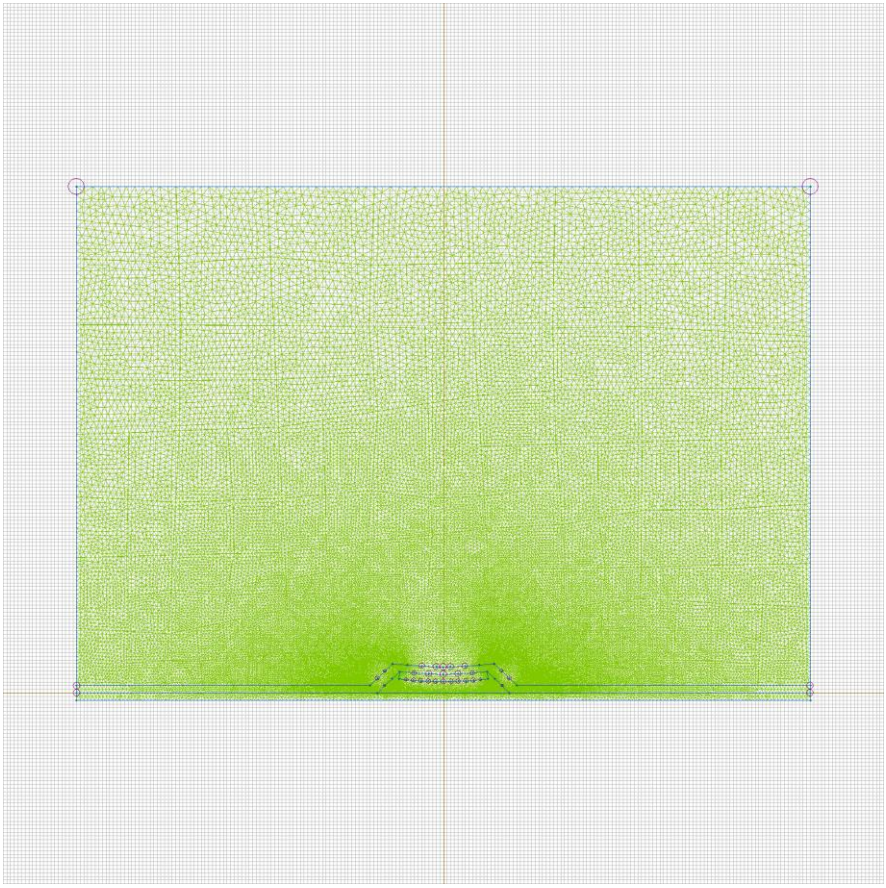


Table 1. Geometry model statistics

	With Label	Total
Blocks	3	5
Edges	2	53
Vertices	1	49

Number of nodes: 41296.

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)

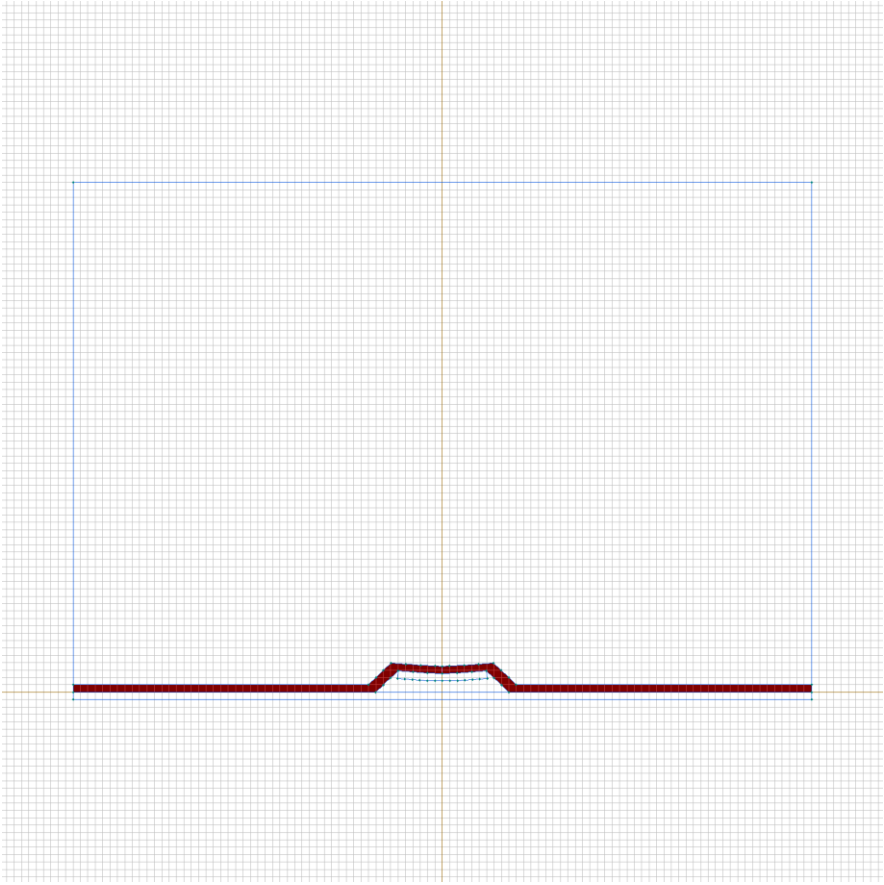
Blocks:	Edges:	Vertices:
• Silicon • copper • air •	• GND • Voltage •	• Fy •

Detailed information about each label is listed below.

Labelled objects: block "Silicon"

There are (1) objects with this label

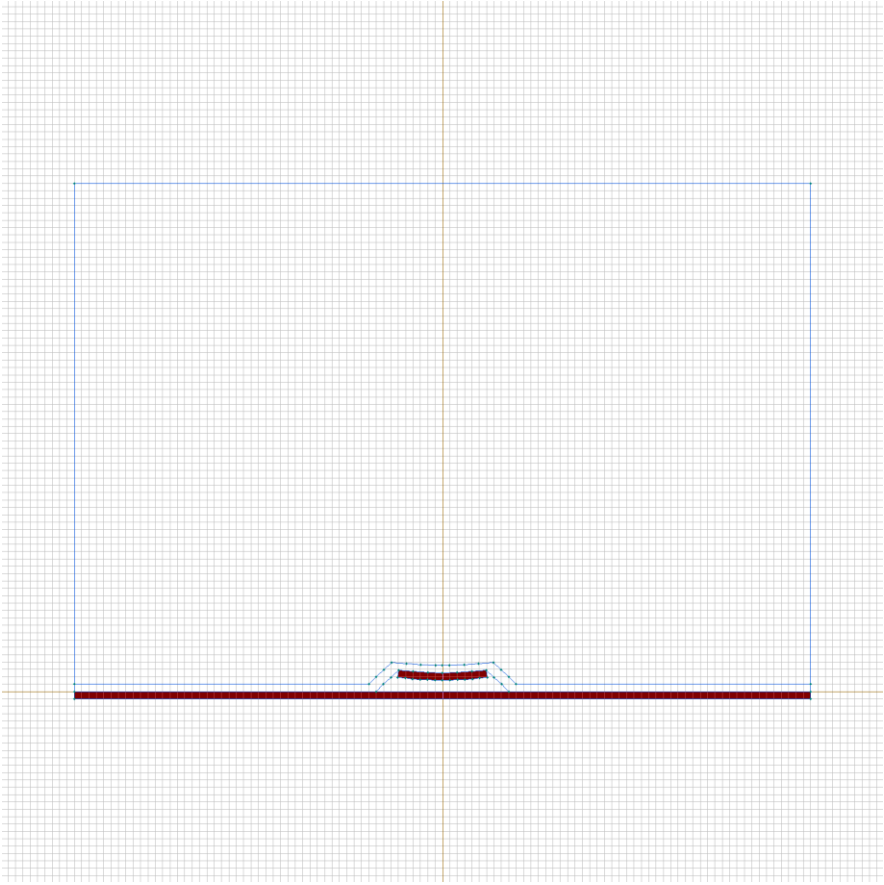
Relative electric permittivity eps_x=11, eps_y=11



Labelled objects: block "copper"

There are (2) objects with this label

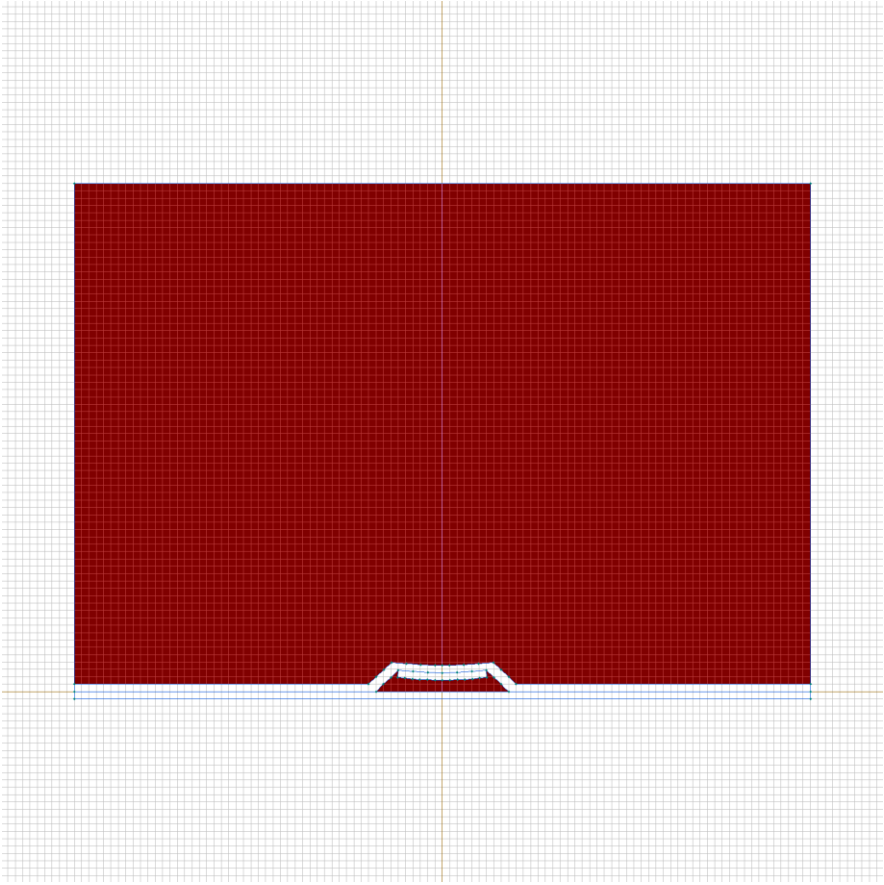
Relative electric permittivity eps_x=0, eps_y=0



Labelled objects: block "air"

There are (2) objects with this label

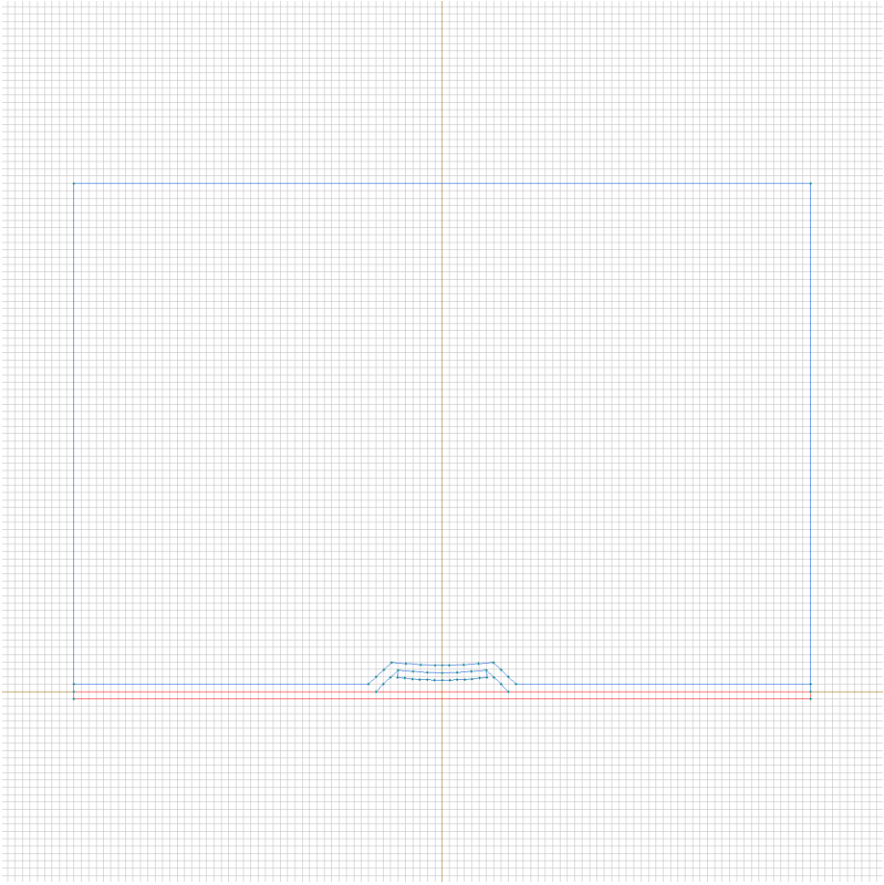
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: edge "GND"

There are (6) objects with this label

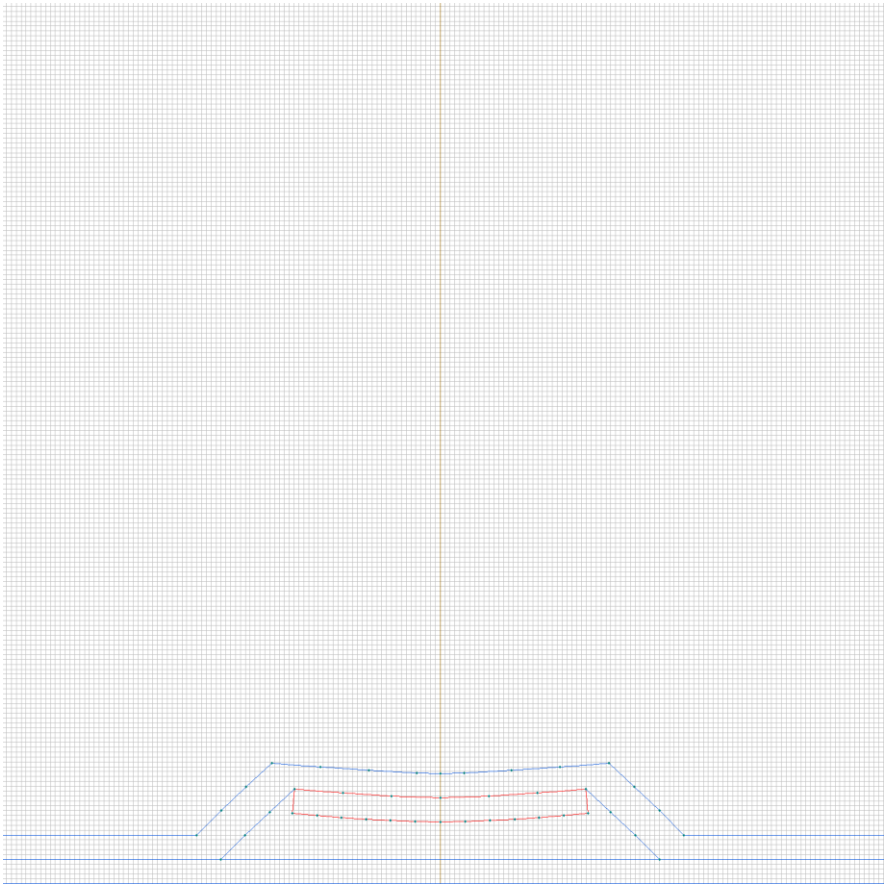
Voltage U=0 [V]



Labelled objects: edge "Voltage"

There are (20) objects with this label

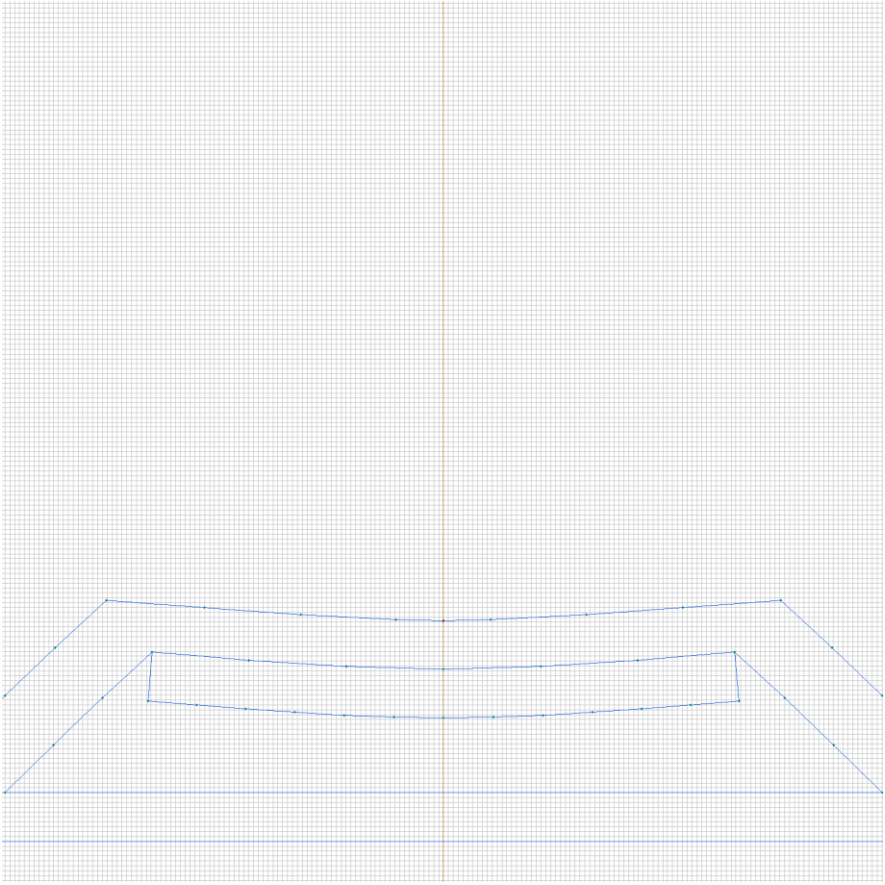
Voltage U=0.001 [V]



Labelled objects: vertex "Fy"

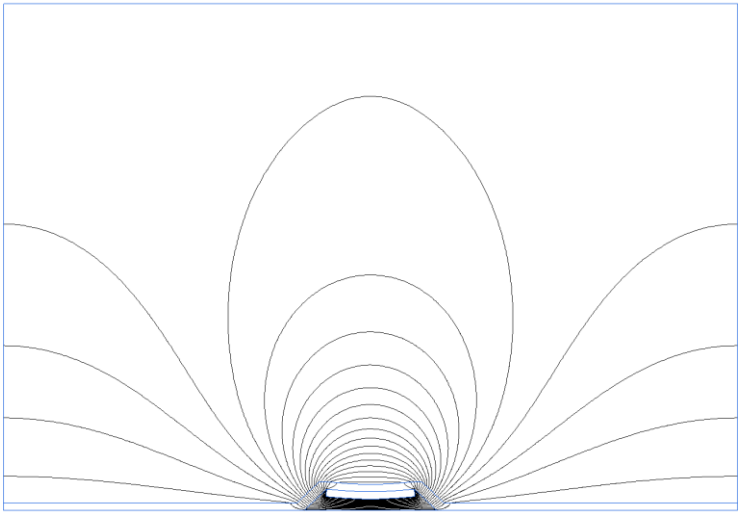
There are (1) objects with this label

No material data (boundary conditions) are specified



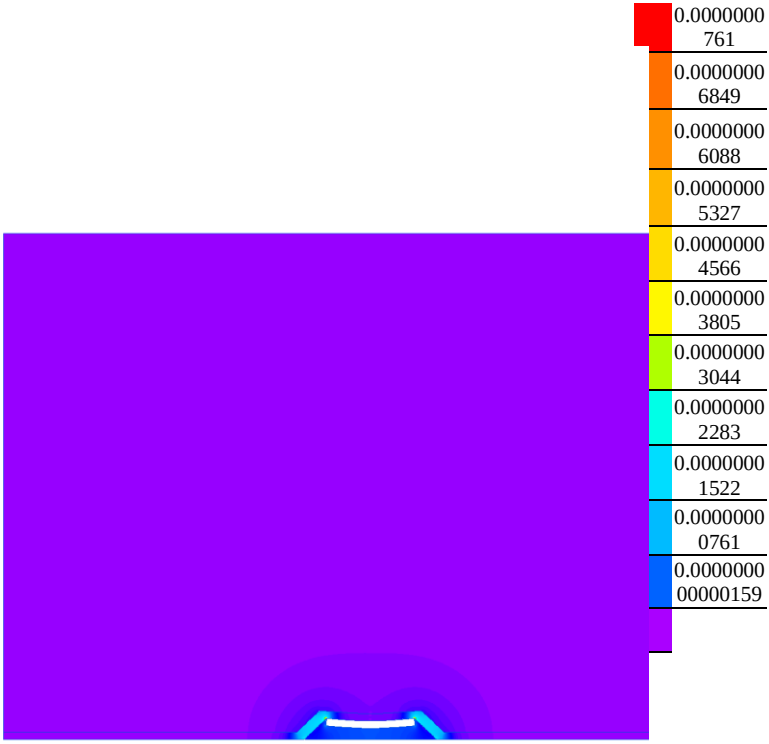
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data