

Lab Report 1

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March 2018

Contents

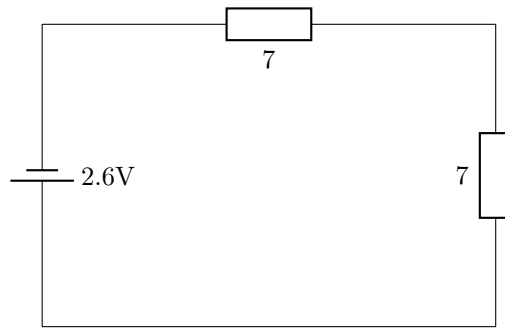
Chapter 1

Theoretical part

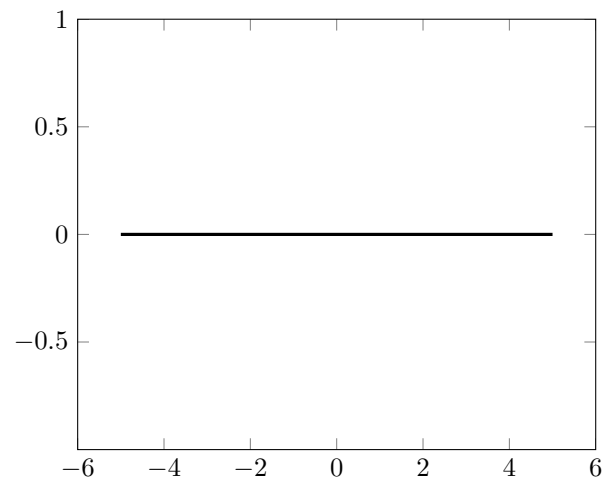
1.1 Circuit calculation

R1	3
R2	7
V1	2,6
UR1	0,78
UR2	1,82

1.2 Circuit diagram



1.3 Circuit plot



Chapter 2

Practical part

2.1 Work with GEDA programs

2.1.1 Work with gschem

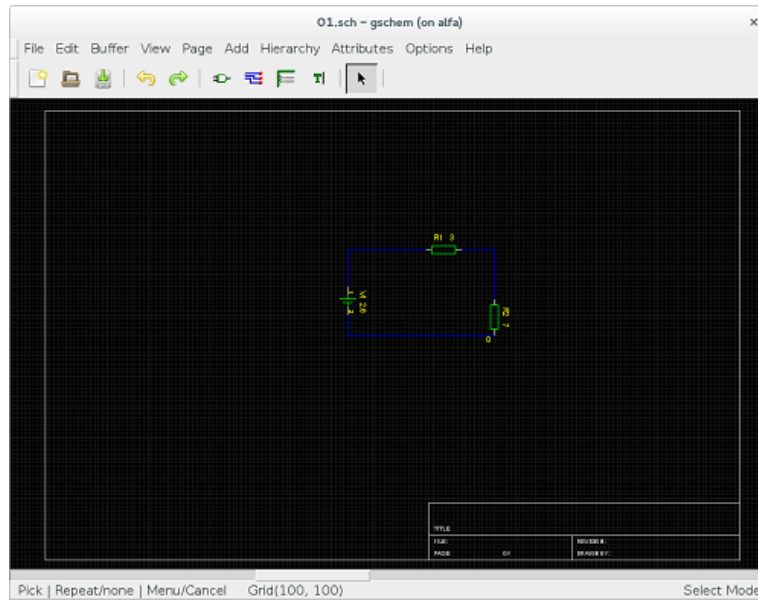


Figure 2.1: Circuit within the gEDA schematics environment. [?]

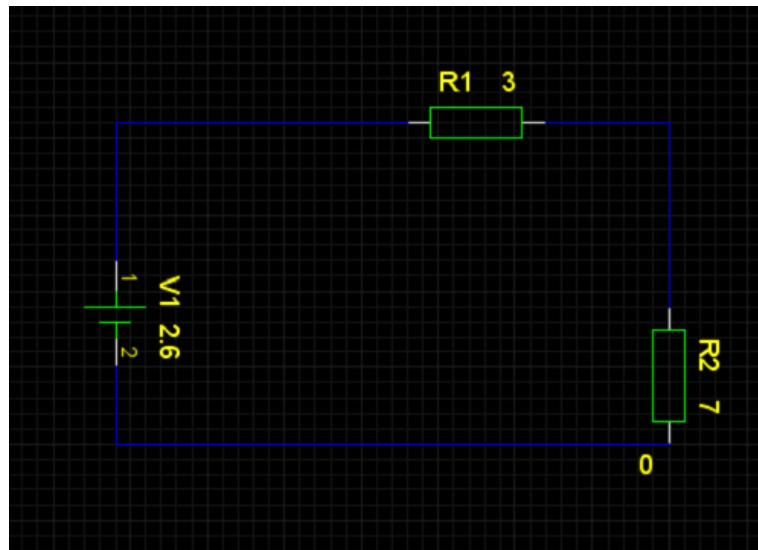


Figure 2.2: Circuit with elements R1, R2 and V1.

2.1.2 Work with gnetlist

```
* Spice netlister for gnetlist
R2 2 0 7
R1 1 2 3
V1 1 0 2.6
.END
```

2.1.3 Work with ngspice

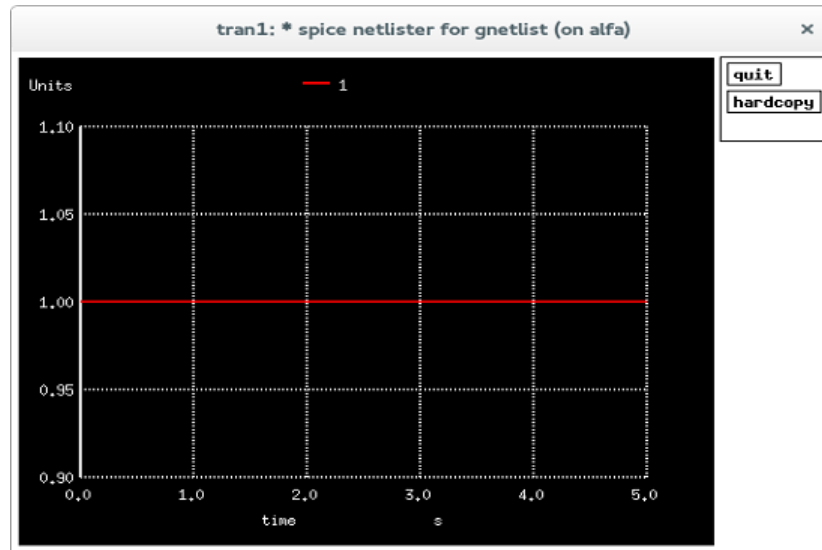


Figure 2.3: Simulation of voltage on resistor R1.

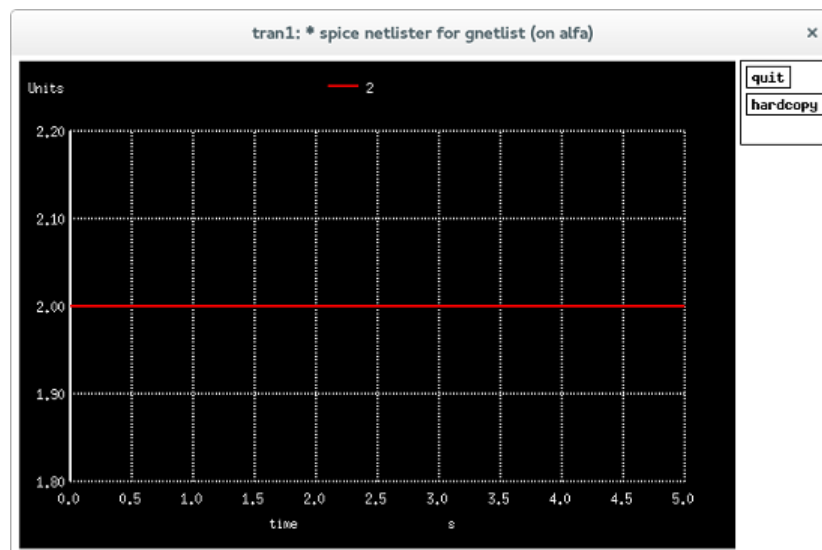


Figure 2.4: Simulation of voltage on resistor R2.

2.2 Work with QUCS programs

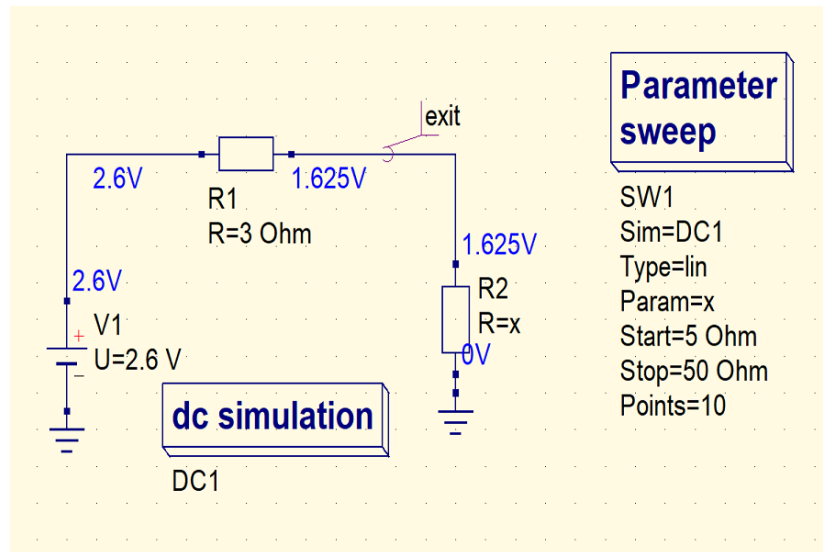


Figure 2.5: Circuit within the QUCS schematics environment. [?]

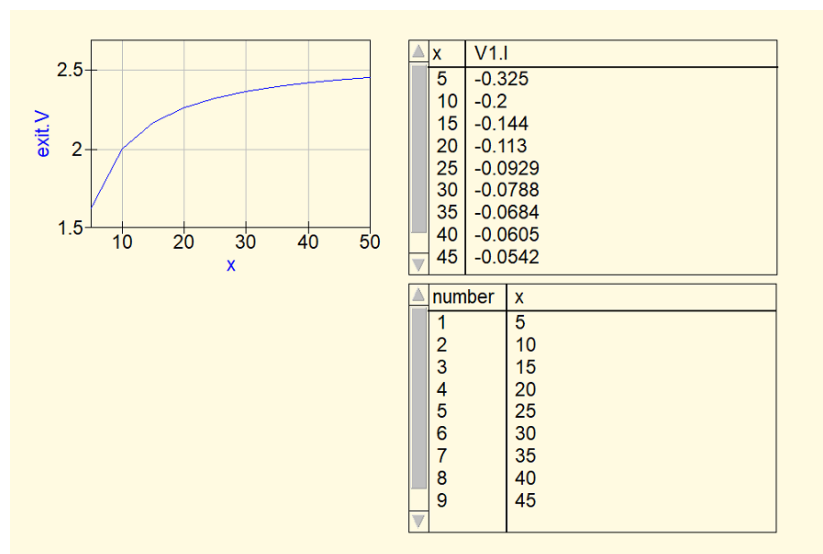


Figure 2.6: Plot with Cartesian coordinates, tabular view of currents flowing from points V1.1 and x.

Bibliography

- [1] Ales Hvezda. *gEDA*
<http://www.geda-project.org/>
- [2] Michael Margraf, Stefan Jahn. *Quite Universal Circuit Simulator*
<http://qucs.sourceforge.net/>