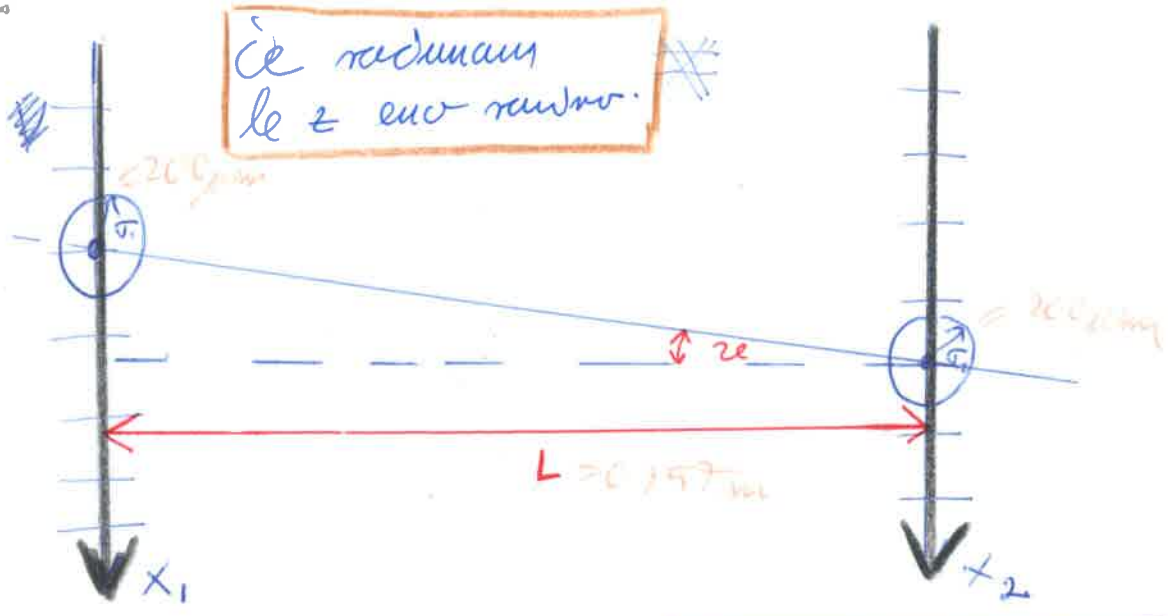


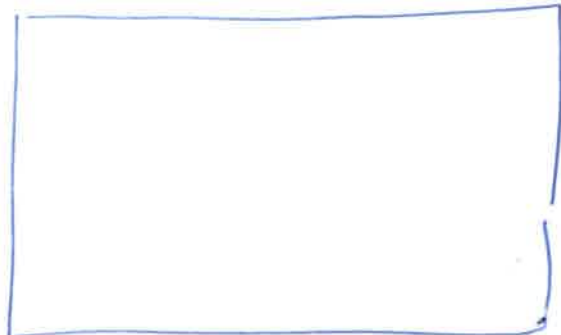
Če računam le z eno ravno.



03/14/12
 500 μm
 11
 1 · 10⁻⁹
 5.776 · 10⁻⁸
 100 μm
 10 · 10⁻⁷
 2.09 · 10⁻⁷
 200 μm
 8.36 · 10⁻⁹
 ↓
 91 μm
 ≈ (200 / 16)

$$\text{tg } z_e = \frac{x_1 - x_2}{L}$$

$$z_e = \arctg \left(\frac{x_1 - x_2}{L} \right)$$



$$\Delta z_e = \frac{1}{1 + \left(\frac{x_1 - x_2}{L} \right)^2} \left[\left| \frac{dx_1}{L} \right| + \left| \frac{dx_2}{L} \right| + \left| \frac{x_1 - x_2}{L^2} \cdot dL \right| \right]$$

Nevtrne so neodrejene, zato naj bi bilo v kvadratu restorov

$$\Delta z_e^2 = \left(\frac{1}{1 + \left(\frac{x_1 - x_2}{L} \right)^2} \right)^2 \left[\left| \frac{\Delta x_1}{L} \right|^2 + \left| \frac{\Delta x_2}{L} \right|^2 + \left| \frac{x_1 - x_2}{L} \right|^2 \left(\frac{\Delta L}{L} \right)^2 \right]$$

$$= \left(\frac{1}{1 + \text{tg}^2 z_e} \right)^2 \left[\left| \frac{\Delta x_1}{L} \right|^2 + \left| \frac{\Delta x_2}{L} \right|^2 + \text{tg}^2 z_e \cdot \left(\frac{\Delta L}{L} \right)^2 \right]$$

$6.58 \cdot 10^{-8}$ $6.98 \cdot 10^{-2}$ 0.09 $1.39 \cdot 10^{-7}$

~~Tu je potrebno celok. Se mi spomni 2 mm~~

$0.2^2 = 0.04$

$$\frac{\Delta L}{L} \sim \frac{0.002}{0.957} = 3 \cdot 10^{-3}$$

$$\left(\frac{\Delta L}{L} \right)^2 = 7 \cdot 10^{-6}$$

Sistemska napaka

$$\sigma_{\theta} \approx \sqrt{2 \times 6.98 \cdot 10^{-8}} = \underline{\underline{0.373 \text{ mrad}}}$$

↑
introduca!

Programu pa da nasleduje:

	x 0	x' 1	y 2	y' 3	
0	8.361e-09	-1.042e-08	-5.173e-10	5.656e-10	x
1	-1.042e-08	2.491e-08	5.66e-10	2.515e-10	x'
2	-5.173e-10	5.66e-10	4.179e-08	-5.206e-08	y
3	5.656e-10	2.515e-10	-5.206e-08	1.245e-07	y'

leavonl and...
Matrica

Sem obrnil to matriko!

4x4 matrix is as follows

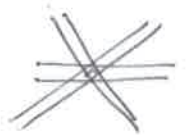
	0	1	2	3
0	8.361e-09	-1.042e-08	-5.173e-10	5.656e-10
1	-1.042e-08	2.491e-08	5.66e-10	2.515e-10
2	-5.173e-10	5.66e-10	4.179e-08	-5.206e-08
3	5.656e-10	2.515e-10	-5.206e-08	1.245e-07

BB: mwdc
class

Sem obrnil to matriko!

4x4 matrix is as follows

	0	1	2	3
0	8.361e-09	-1.042e-08	-5.173e-10	5.656e-10
1	-1.042e-08	2.491e-08	5.66e-10	2.515e-10
2	-5.173e-10	5.66e-10	4.179e-08	-5.206e-08
3	5.656e-10	2.515e-10	-5.206e-08	1.245e-07



$$\sigma_x = \sqrt{S_{xx}} = \sqrt{8.36 \cdot 10^{-9}} = 91 \cdot 10^{-6} = \underline{\underline{91 \mu\text{m}}} \left(\sim \frac{200}{\sqrt{6}} \mu\text{m} \right)$$

↑
šrot račun

$$\sigma_{x'} \approx \sigma_{T_4} = \sqrt{S_{x'x'}} = \sqrt{2.49 \cdot 10^{-8}} = \underline{\underline{0.157 \text{ mrad}}} \left(\sim \frac{0.373}{\sqrt{6}} \text{ mrad} \right)$$

$$\sigma_y = \sqrt{S'_{yy}} = \sqrt{4.179 \cdot 10^{-8}} = \underline{\underline{200 \mu\text{m}}}$$

$$\sigma_{y'y'} = \sqrt{S'_{y'y'}} = \sqrt{1.245 \cdot 10^{-7}} = \underline{\underline{0.353 \text{ mrad}}}$$

Tukaj se
očito mo
ne reducira!

```

#r e'd experiment
#*- mode: Text -*-
#-----
# Chamber configuration
#-----

```

```

# Chamber configuration
#-----

```

```

# Plane configuration. One string of the all plane names.
# The names are case sensitive. If the last character is
# a "p", it indicates a staggered plane that is to be paired
# with the correponding non-p one. Optional plane description
# text may be put in each plane's section.

```

```

BB.mwdc.planeconfig = u1 u1p u2 u2p x1 x1p x2 x2p v1 v1p v2 v2p
#BB.mwdc.search_depth = 10
#BB.mwdc.search_depth = 12
#BB.mwdc.search_depth = 8
BB.mwdc.search_depth = 8
BB.mwdc.maxslope = 2.5

```

```

# Wire angles. Specify the angle of the _normal_ to the wires, pointing
# along the direction of increasing wire number. Positive angles mean
# rotation from x towards y (so the y-axis is at +90deg).
BB.mwdc.u.angle = 30.0
BB.mwdc.v.angle = -30.0
BB.mwdc.x.angle = 0.0

```

```

# Enable support for event display
BB.mwdc.event_display = 1

```

```

# "Crate map" for the MWDC. Specifies DAQ module configuration.
# Numbers are: ROC, TDC, TDC_begin, TDC_end
# Allows mixing of Fastbus/VME and modules with different resolutions.
# Since usually a range of slots is filled with identical modules, we define
# slot ranges. If individual modules within a range are different, append
# their definition at the end; they will override earlier definitions.
#
# FIXME: naturally, this should be part of the decoder's crate map
#

```

```

# Each rows is:      crate slot_lo slot_hi model# resol  nchan
#                   (ps/ch)
BB.mwdc.cratemap =  9      1      10      1877    500    96  \
                   9      14      25      1877    500    96  \
                   10     1      10      1877    500    96  \
                   10     14      21      1877    500    96  \
                   10     23      25      1877    500    96

```

```

#-----
# Global defaults
# - can be overridden for individual planes
#
# Note: TDC offsets are in ns
#-----

```

```

#BB.mwdc.disable_tracking = 1

```

```

BB.mwdc.wire.spacing = 0.01
BB.mwdc.xp.res = 2.e-04
BB.mwdc.drift.min = -50
BB.mwdc.drift.max = 200
BB.mwdc.timecut = 1
BB.mwdc.paironly = 0
#BB.mwdc.ttd.converter = LinearTTD
#BB.mwdc.ttd.converter = TanhFitTTD
BB.mwdc.ttd.converter = Pol2FitTTD
BB.mwdc.u1.ttd.param = 0.000510666 -18546.1 1.32399e+12 -0.000348274 51103.7 1.33042e+10 -0.000488906
66790.6 -2.01536e+11 -7.88344e-05 62353.8 -1.96377e+11 0.00431174 3658.22
BB.mwdc.u1p.ttd.param = 0.000611076 -26721 1.52388e+12 -0.000376136 54175.6 -2.4833e+10 -0.000280012
61923.4 -1.73505e+11 -0.000814531 75072.7 -2.50018e+11 0.00444238 2482.13

```

Ta skemljica se uposteva v rodumih.
To sem prebral iz $5 \cdot 10^{-4} = 500 \mu\text{m}$.
na 200 μm .