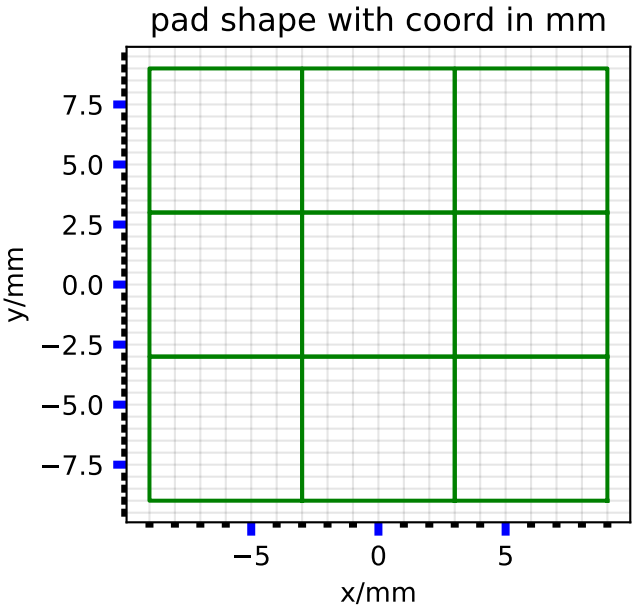
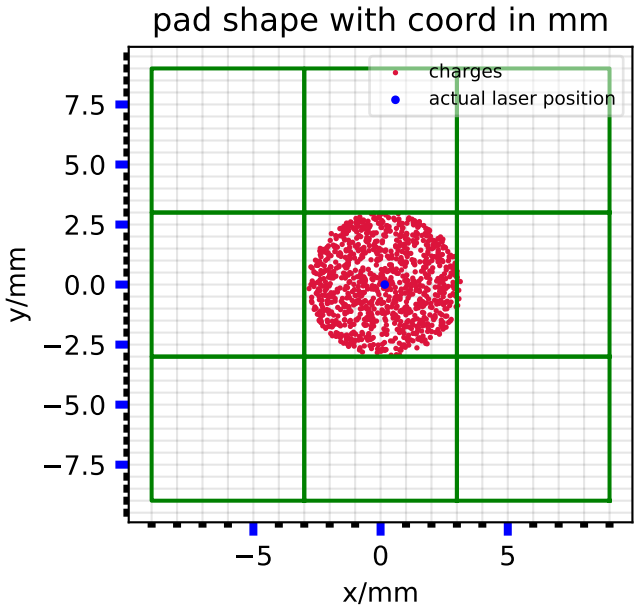
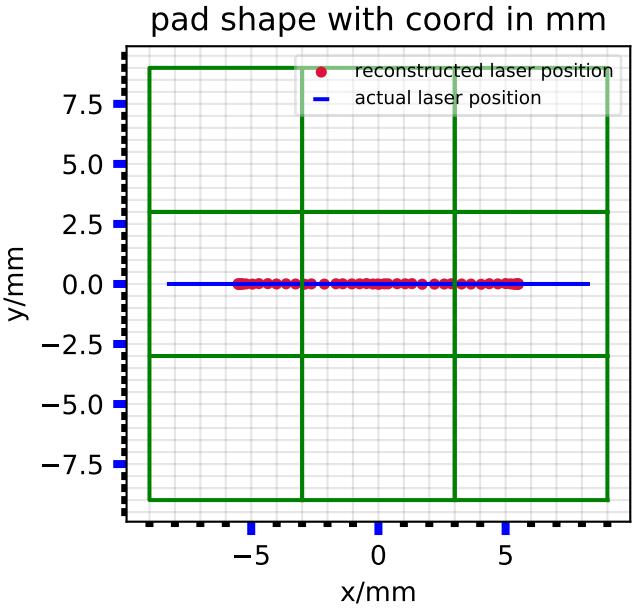
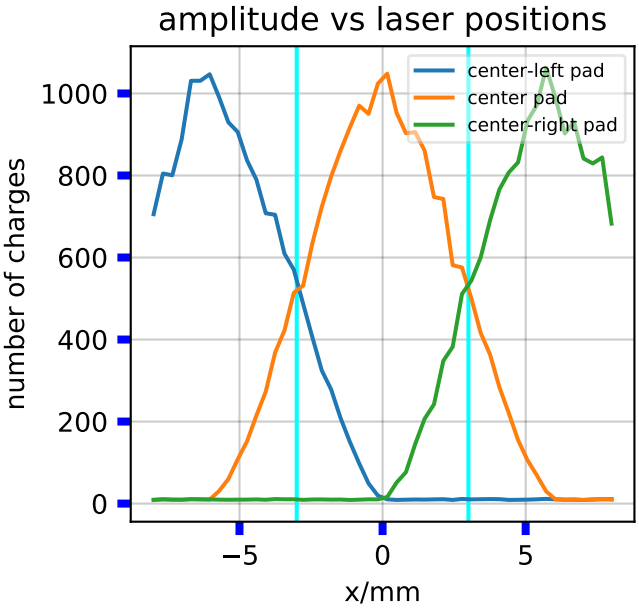
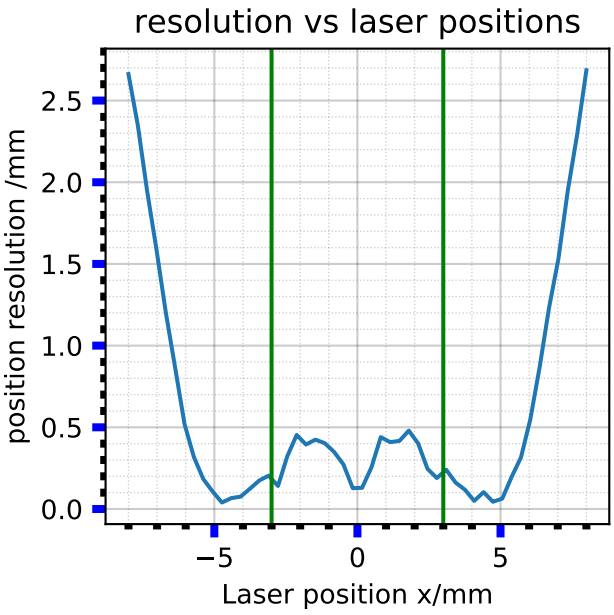
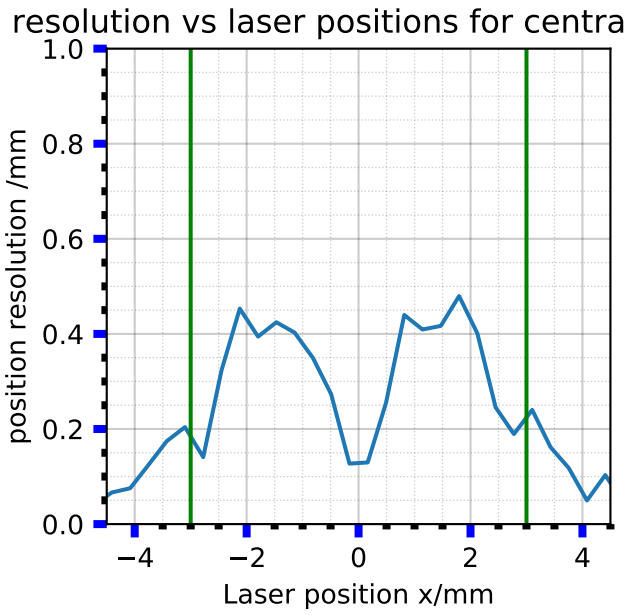

pad shape with coord in mm
y/mm
x/mm


pad shape with coord in mm
charges
actual laser position
y/mm
x/mm

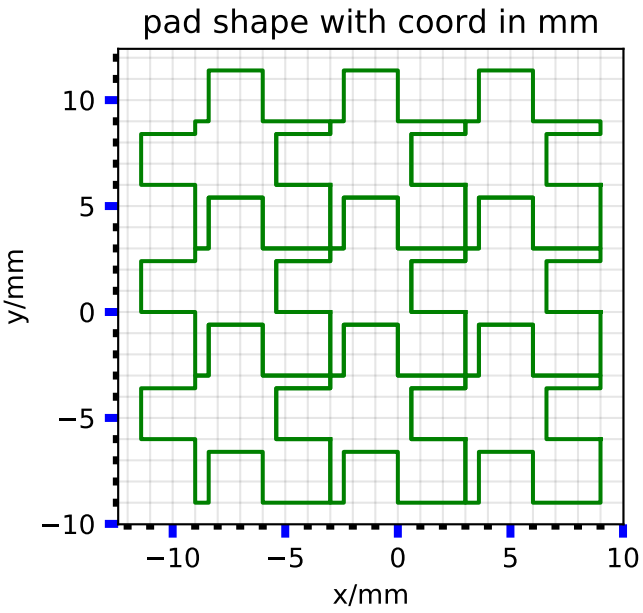

pad shape with coord in mm
reconstructed laser position
actual laser position
y/mm
x/mm

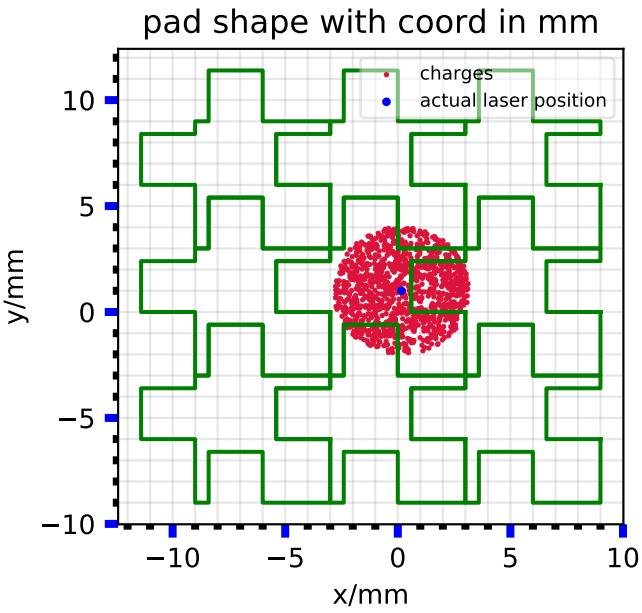

amplitude vs laser positions
center-left pad
center pad
center-right pad
number of charges
x/mm

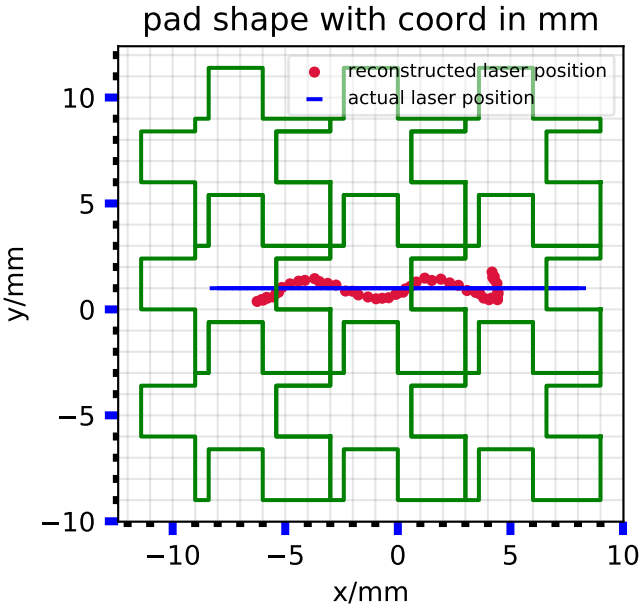

resolution vs laser positions
position resolution /mm
Laser position x/mm

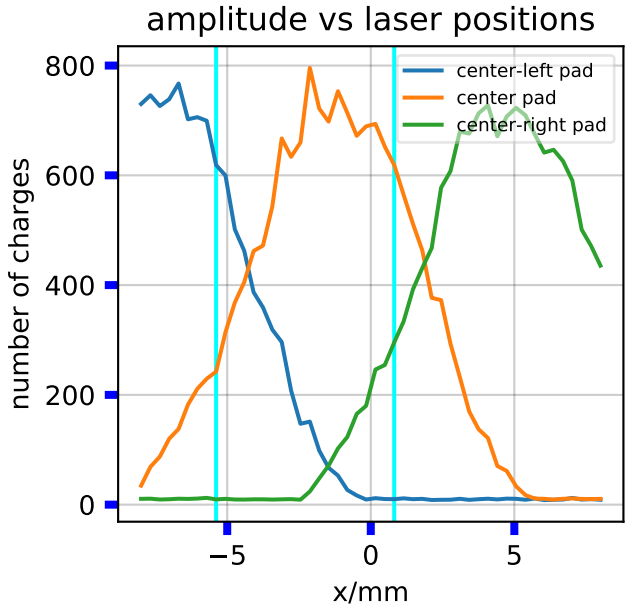

resolution vs laser positions for central pad
position resolution /mm
Laser position x/mm

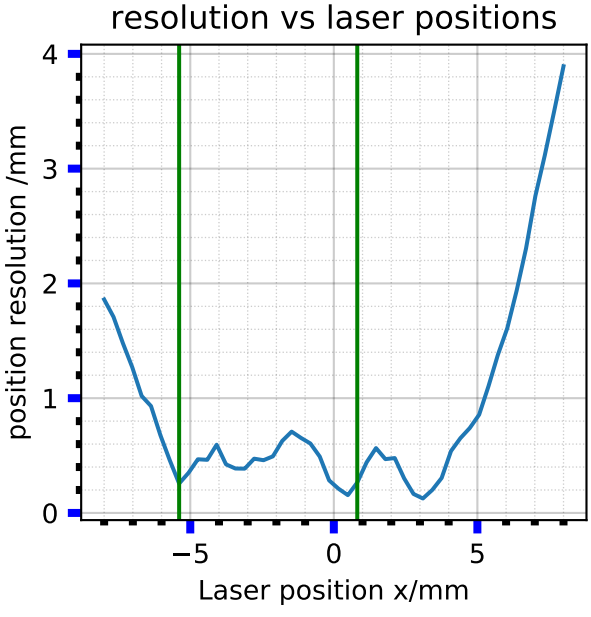
```
#shape of a pad, choose from 'regular', 'nose', 'sin'
shape:nose
#length of one unit pad, unit in mm
length:6
#if nose shape is picked, the start of a nose, range from 0 to 0.45
nose_start:0.5
nose_end:0.8
nose_height:0.4
sin_height:0.3

#radius of a laser spot, unit in mm
radius:3
charges:1000
noise_mean:1e-2
noise_variance:1e-3
uncertainty:0.1

#define simulation
average:2
laser_positions:50
start:[-8,1]
end:[8,1]

#draw graph
compare:yes
```

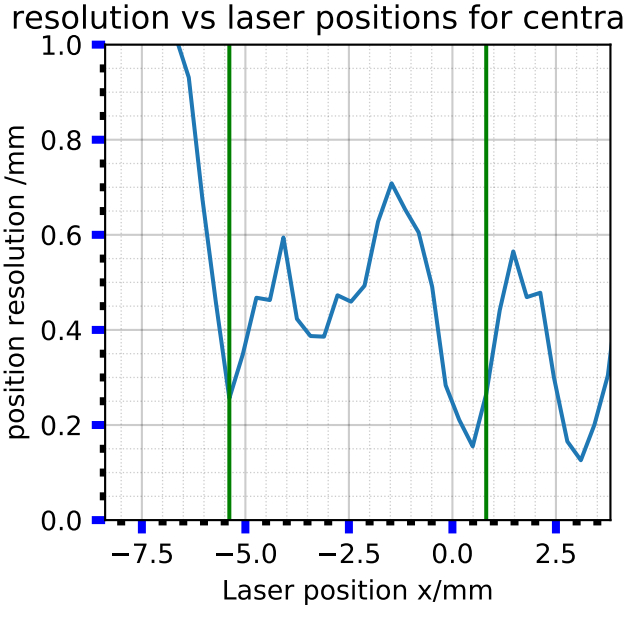

pad shape with coord in mm
y/mm
x/mm

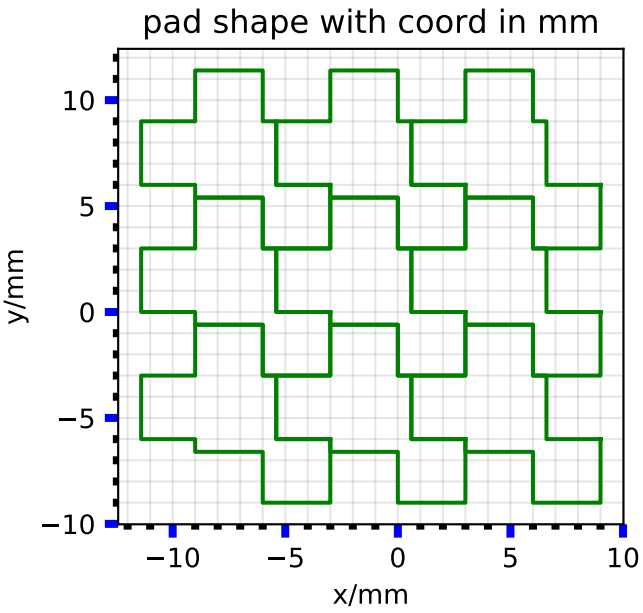

pad shape with coord in mm
charges
actual laser position
y/mm
x/mm

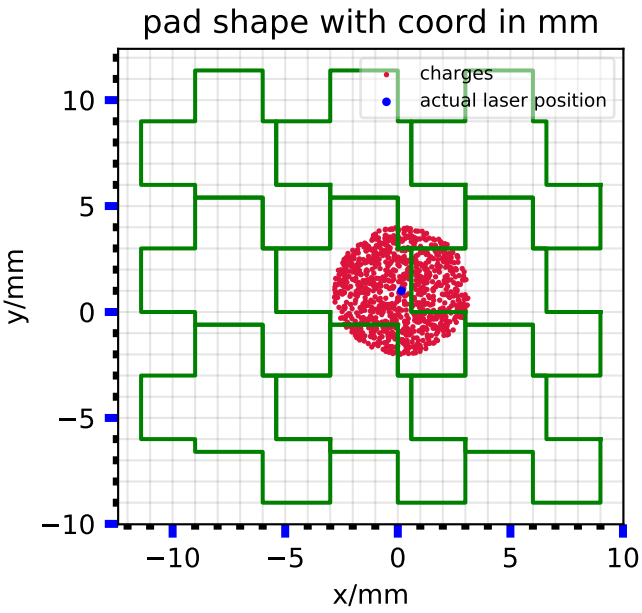

pad shape with coord in mm
reconstructed laser position
actual laser position
y/mm
x/mm

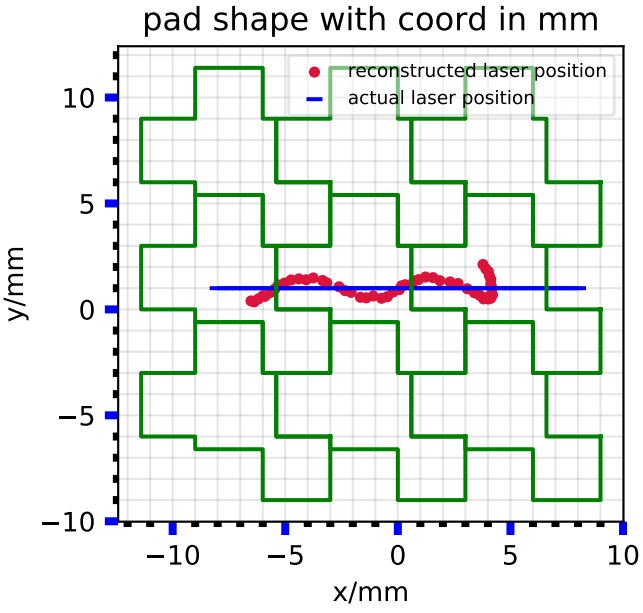

amplitude vs laser positions
center-left pad
center pad
center-right pad
number of charges
x/mm

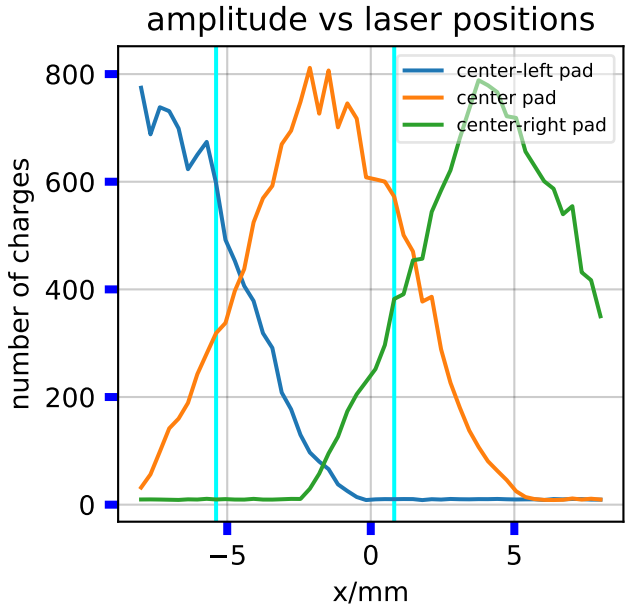

resolution vs laser positions
position resolution /mm
Laser position x/mm

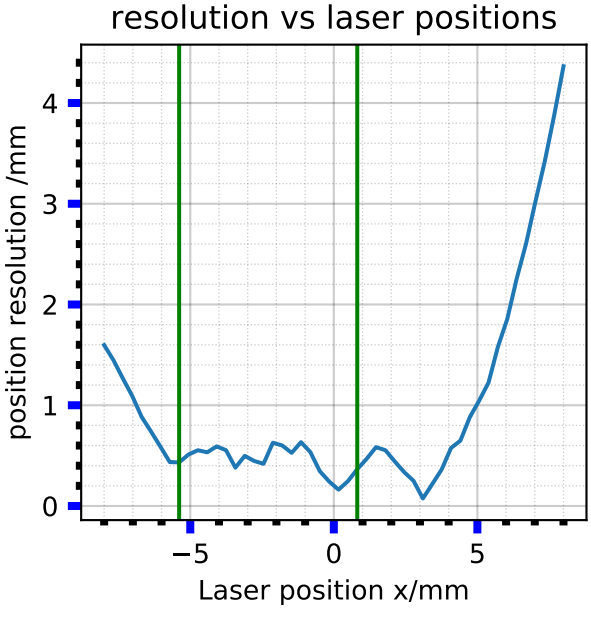

resolution vs laser positions for central pad
position resolution /mm
Laser position x/mm

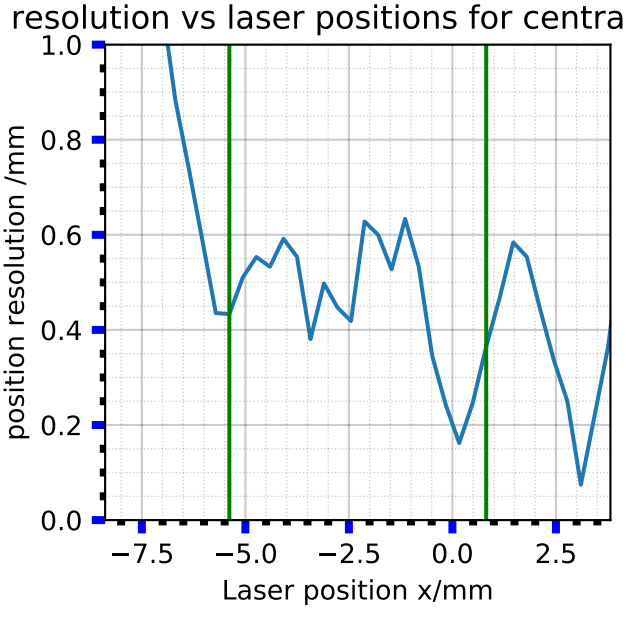

pad shape with coord in mm
y/mm
x/mm

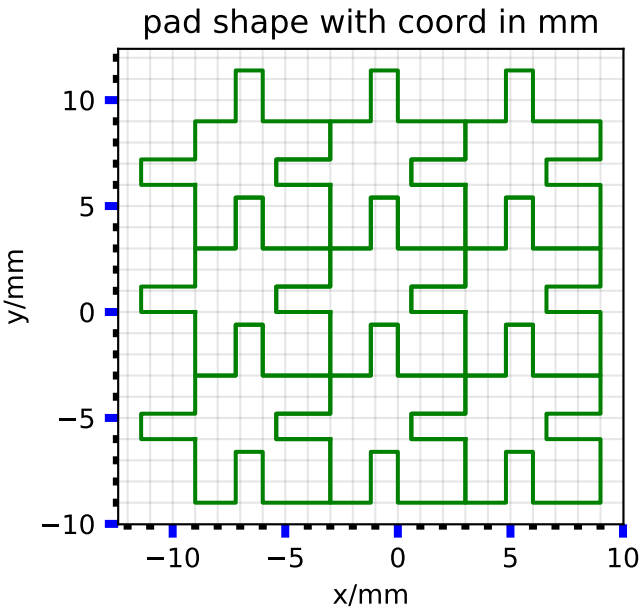

pad shape with coord in mm
charges
actual laser position
y/mm
x/mm

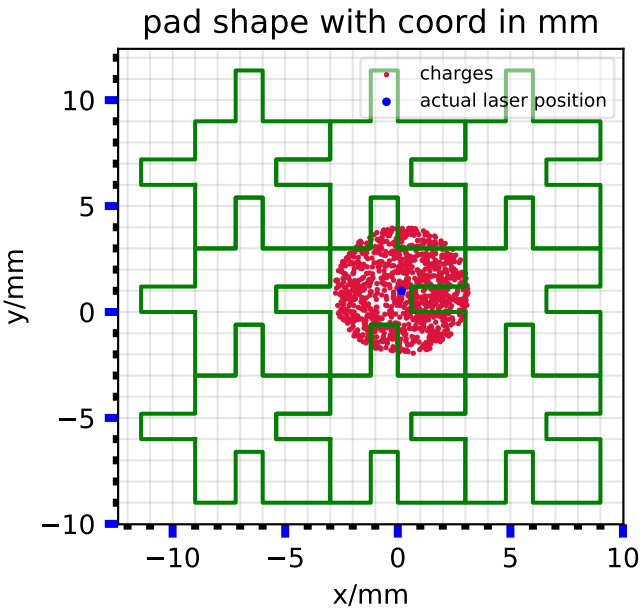

pad shape with coord in mm
reconstructed laser position
actual laser position
y/mm
x/mm

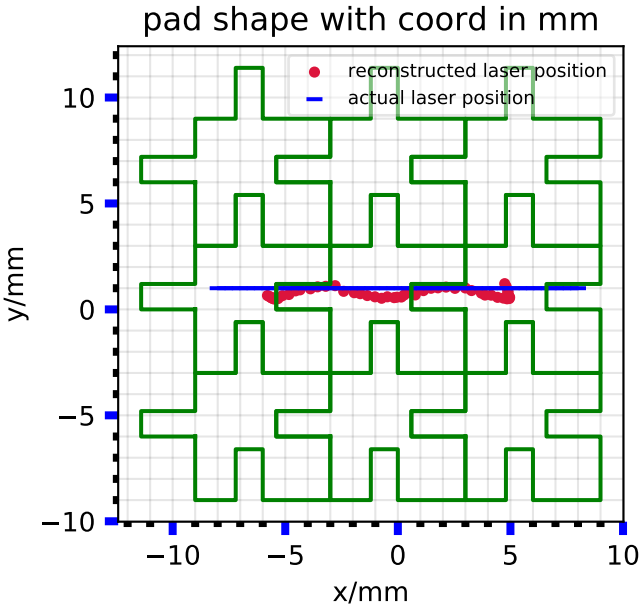

amplitude vs laser positions
center-left pad
center pad
center-right pad
number of charges
x/mm

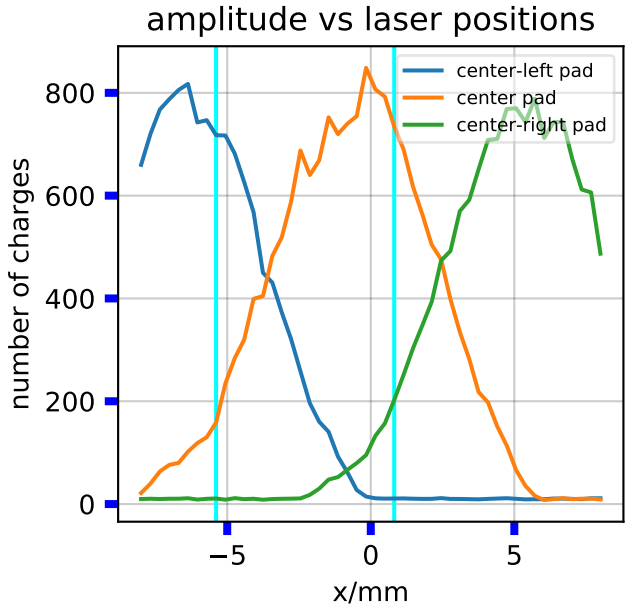

resolution vs laser positions
position resolution /mm
Laser position x/mm

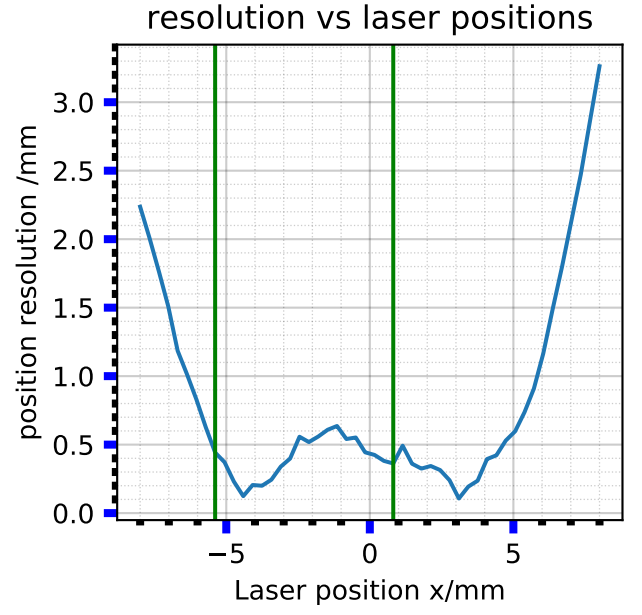

resolution vs laser positions for central pad
position resolution /mm
Laser position x/mm

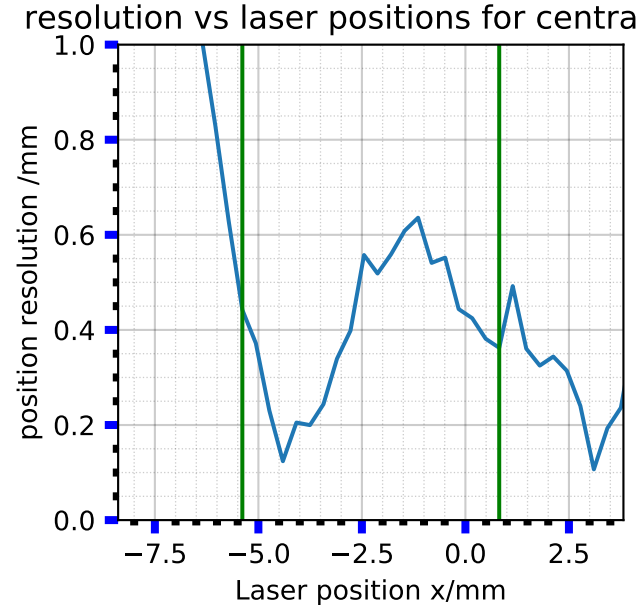

pad shape with coord in mm
y/mm
x/mm
10
5
0
−5
−10
−10
−5
0
5
10

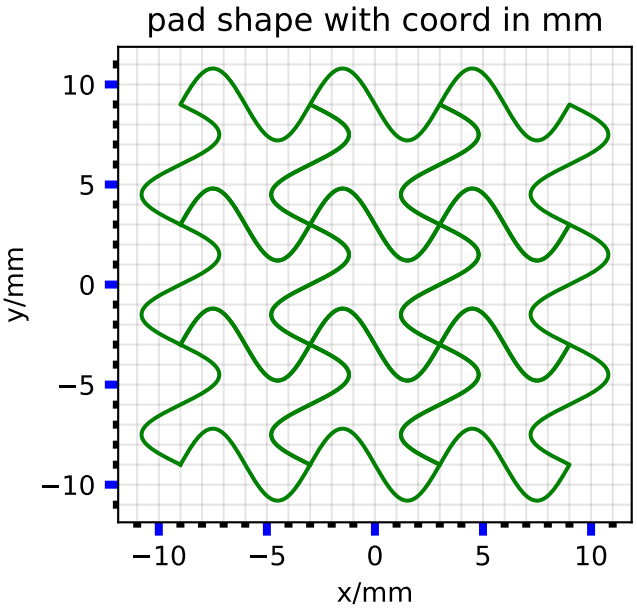

pad shape with coord in mm
charges
actual laser position
y/mm
x/mm
10
5
0
−5
−10
−10
−5
0
5
10

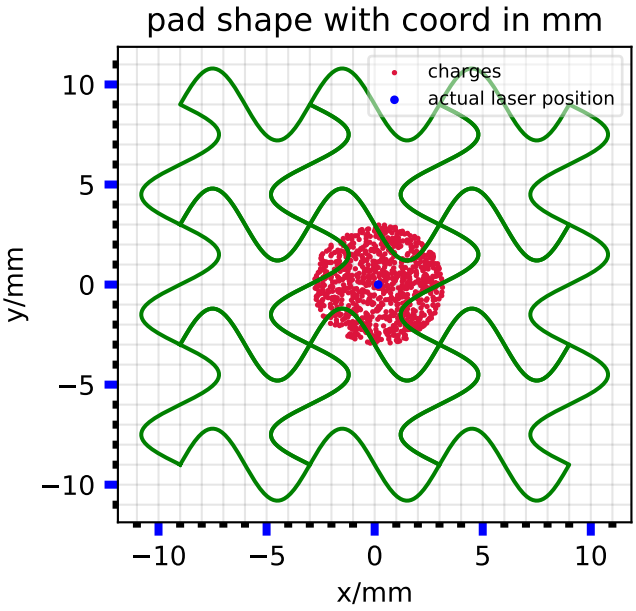

pad shape with coord in mm
reconstructed laser position
actual laser position
y/mm
x/mm
10
5
0
−5
−10
−10
−5
0
5
10

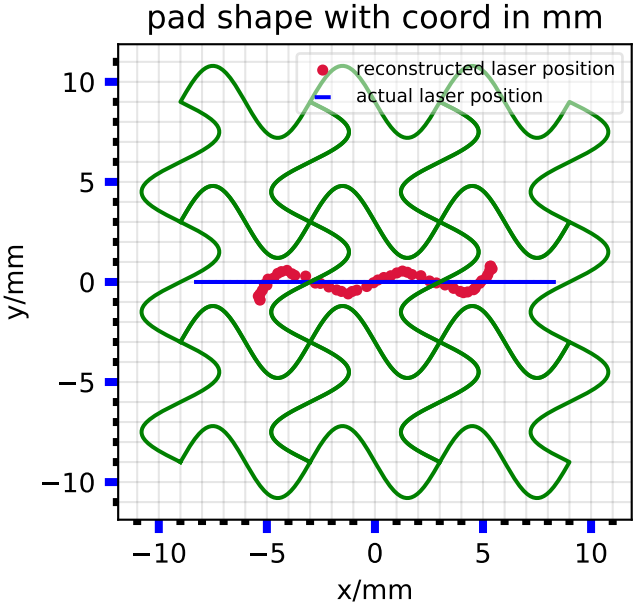

amplitude vs laser positions
center-left pad
center pad
center-right pad
number of charges
x/mm
800
600
400
200
0
−5
0
5

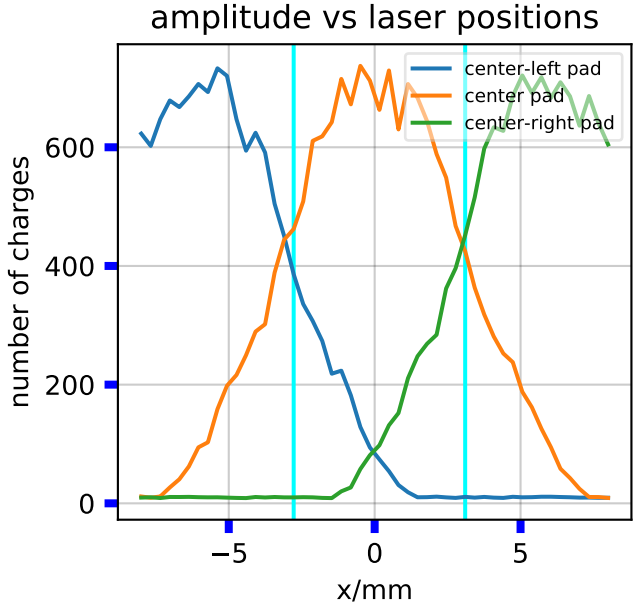

resolution vs laser positions
position resolution /mm
Laser position x/mm
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−5
0
5

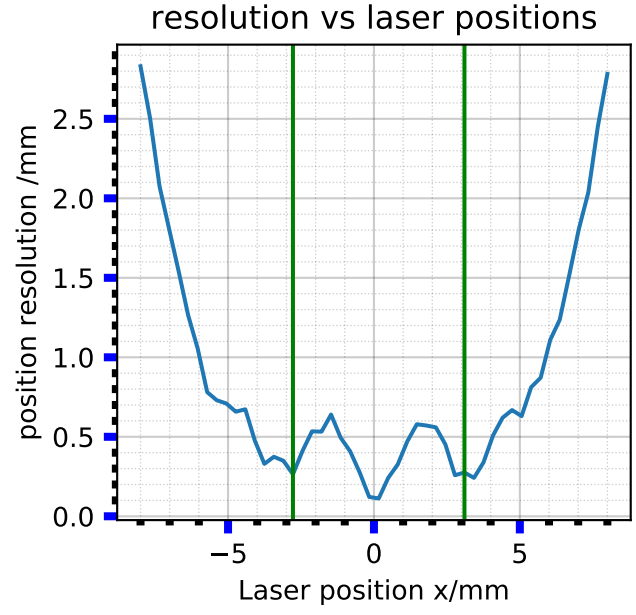

resolution vs laser positions for central pad
position resolution /mm
Laser position x/mm
1.0
0.8
0.6
0.4
0.2
0.0
−7.5
−5.0
−2.5
0.0
2.5

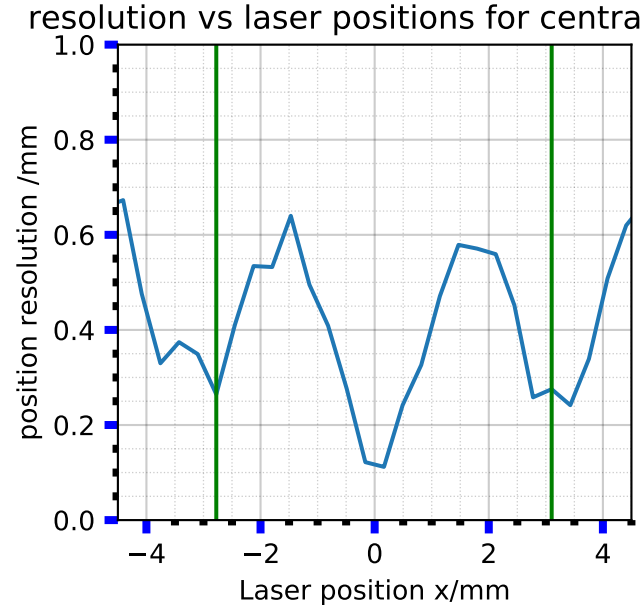

pad shape with coord in mm
y/mm
x/mm

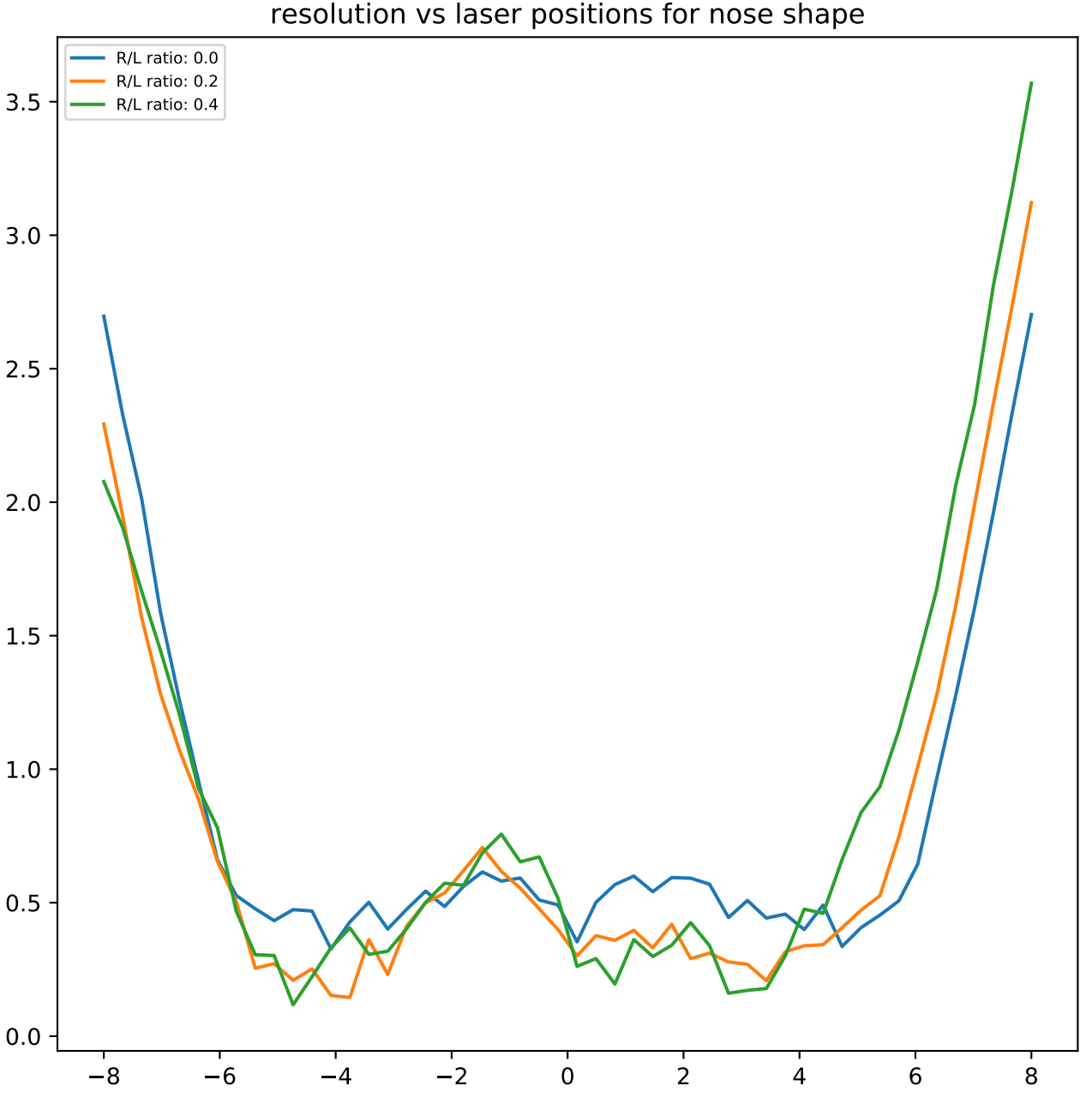

pad shape with coord in mm
charges
actual laser position
y/mm
x/mm

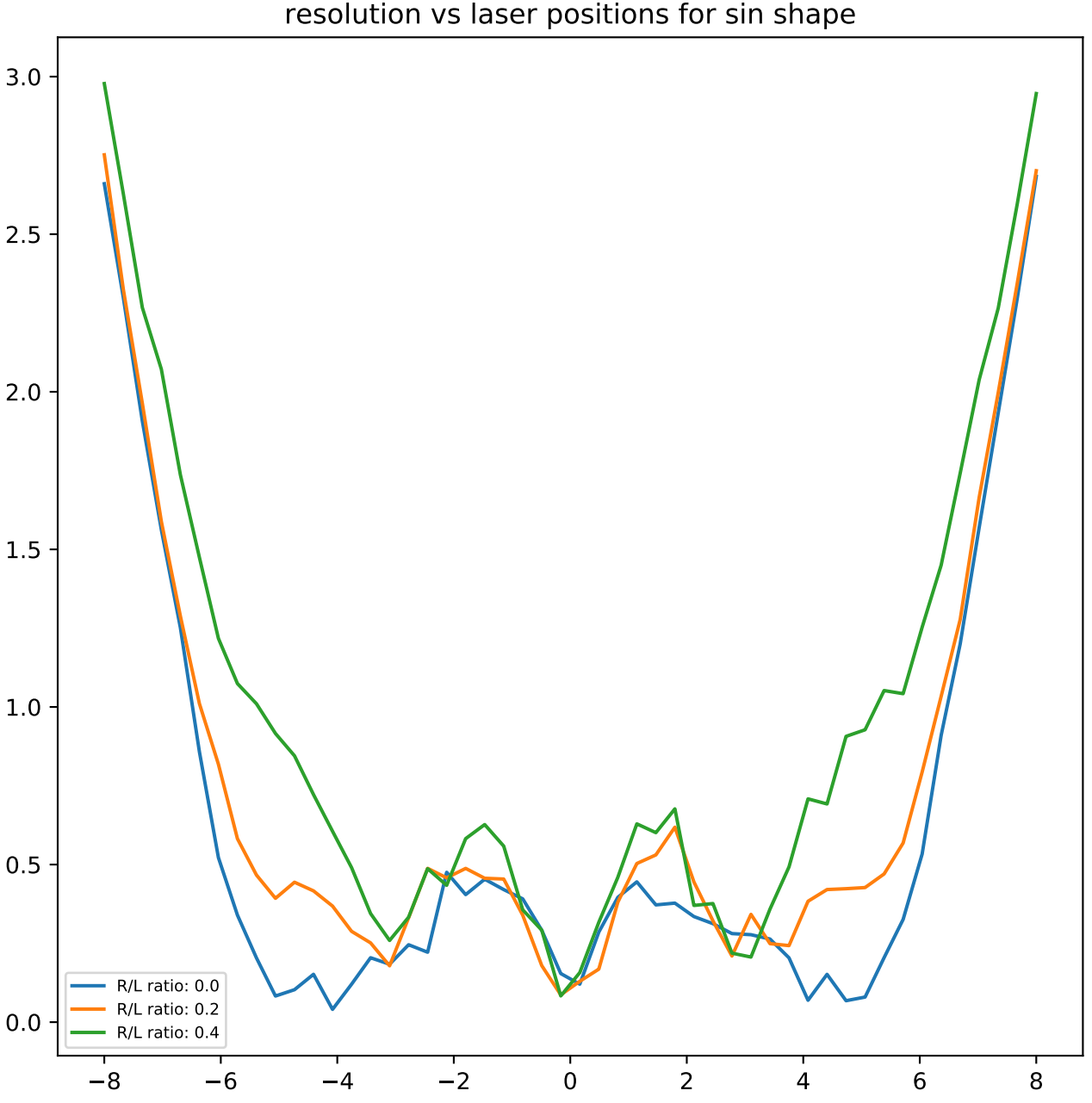

pad shape with coord in mm
reconstructed laser position
actual laser position
y/mm
x/mm


amplitude vs laser positions
center-left pad
center pad
center-right pad
number of charges
x/mm


resolution vs laser positions
position resolution /mm
Laser position x/mm


resolution vs laser positions for central pad
position resolution /mm
Laser position x/mm


resolution vs laser positions for nose shape
R/L ratio: 0.0
R/L ratio: 0.2
R/L ratio: 0.4
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−8
−6
−4
−2
0
2
4
6
8


resolution vs laser positions for sin shape
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−8
−6
−4
−2
0
2
4
6
8
R/L ratio: 0.0
R/L ratio: 0.2
R/L ratio: 0.4