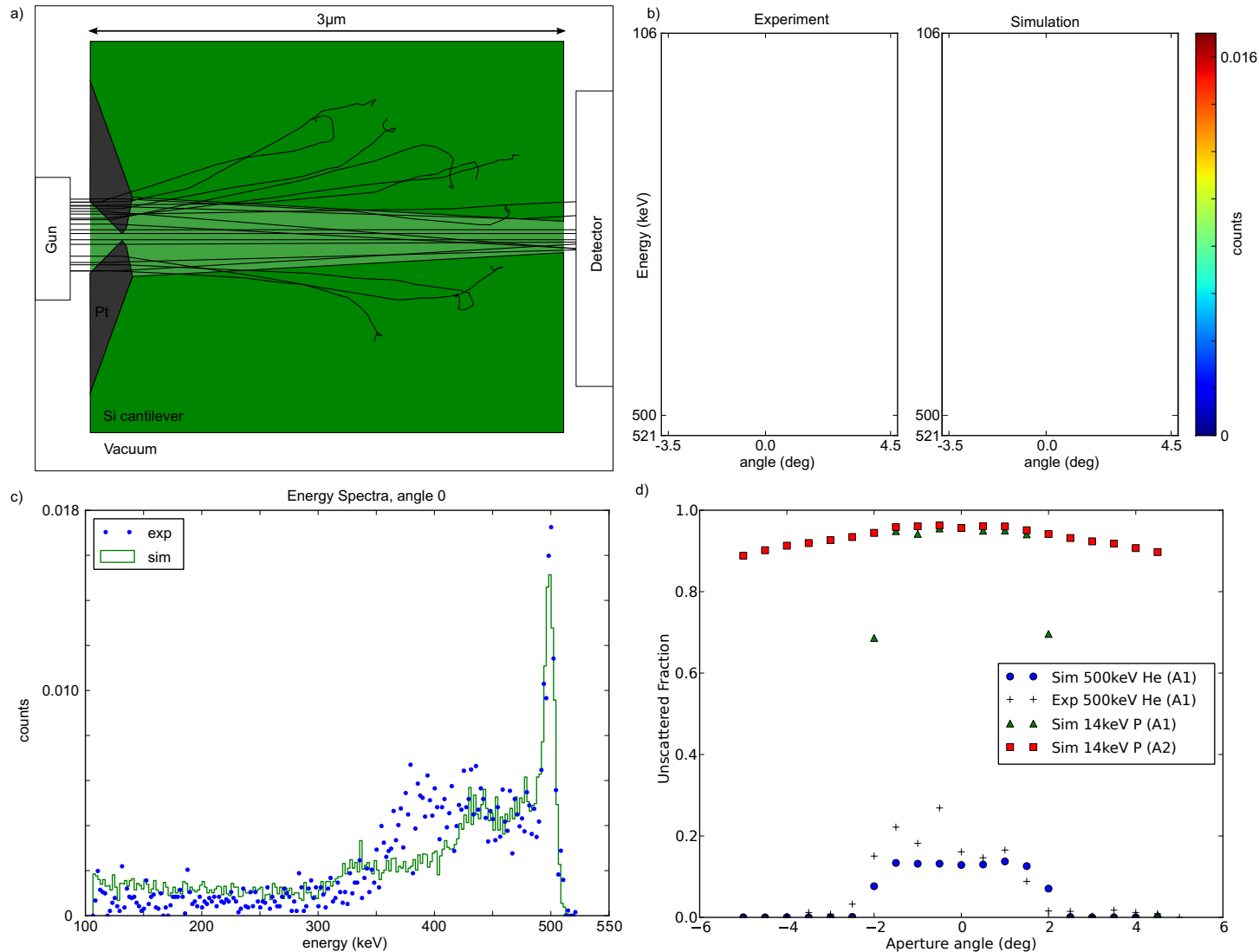

a)
3μm
Gun
Detector
Pt
Si cantilever
Vacuum
b)
Experiment
Simulation
106
500
521
-3.5
0.0
4.5
angle (deg)
Energy (keV)
0.016
0
counts
c)
Energy Spectra, angle 0
exp
sim
0.018
0.010
0
counts
100
200
300
400
500
550
energy (keV)
d)
Unscattered Fraction
Sim 500keV He (A1)
Exp 500keV He (A1)
Sim 14keV P (A1)
Sim 14keV P (A2)
1.0
0.8
0.6
0.4
0.2
0.0
−6
−4
−2
0
2
4
6
Aperture angle (deg)