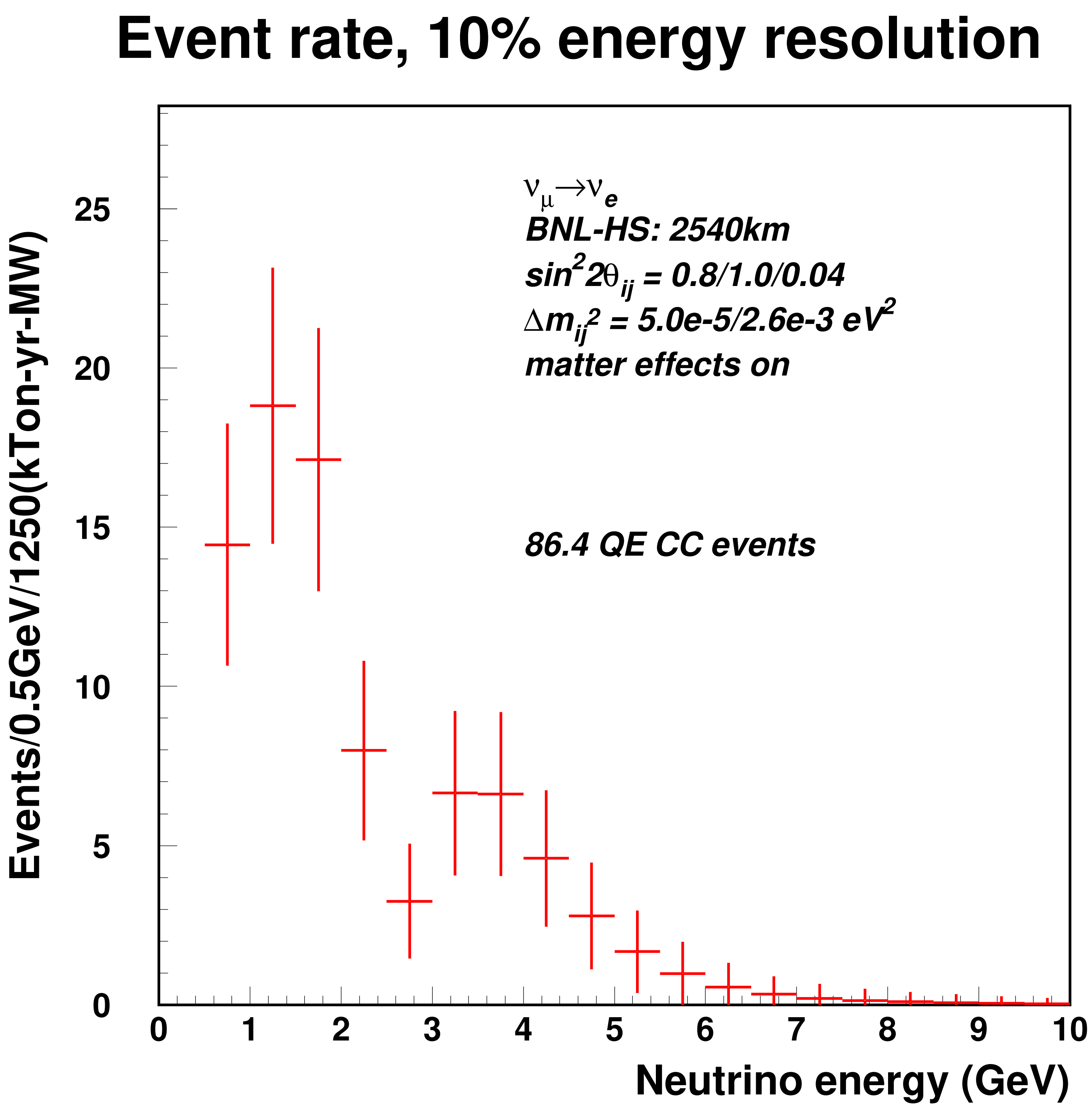
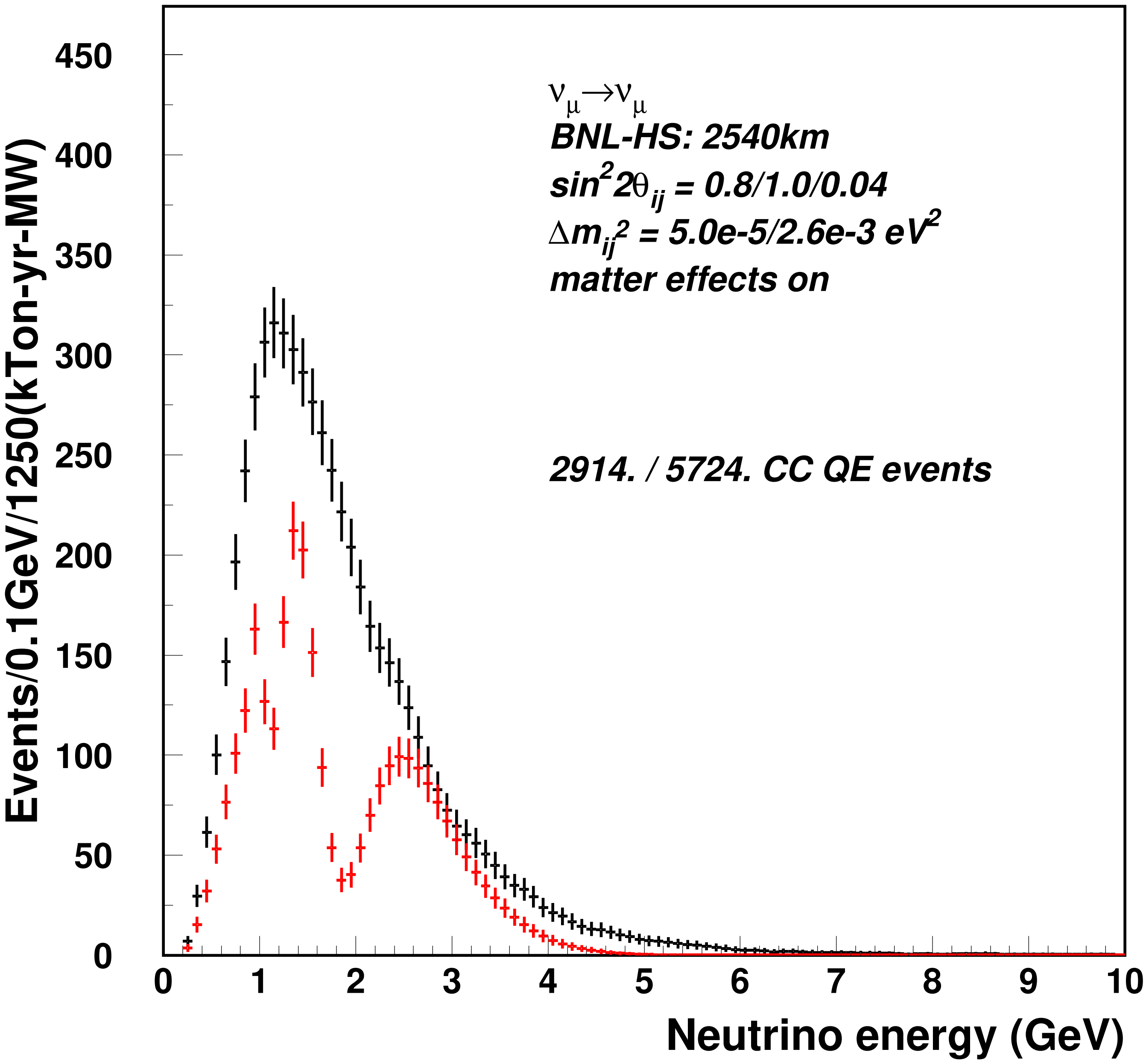
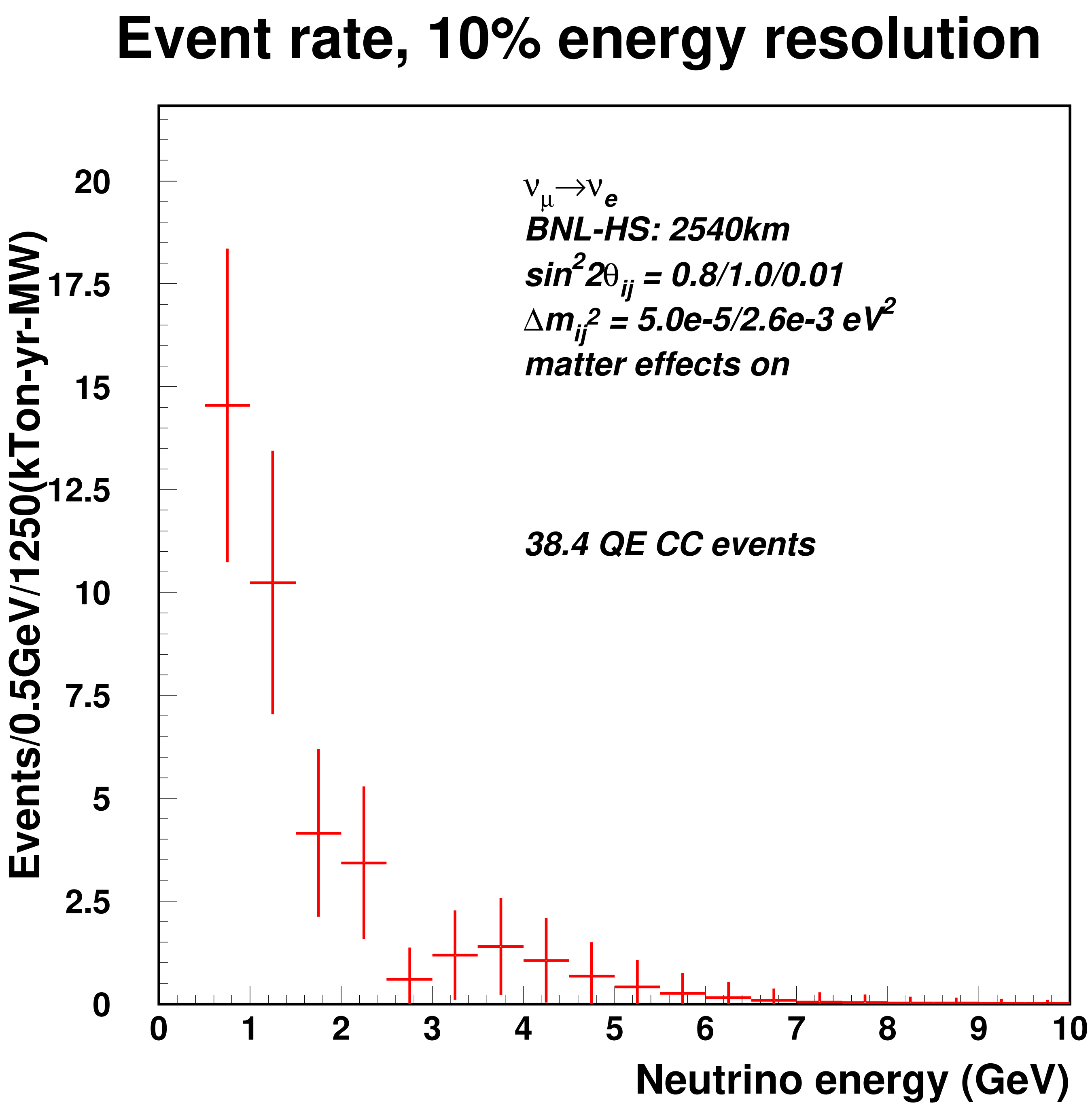
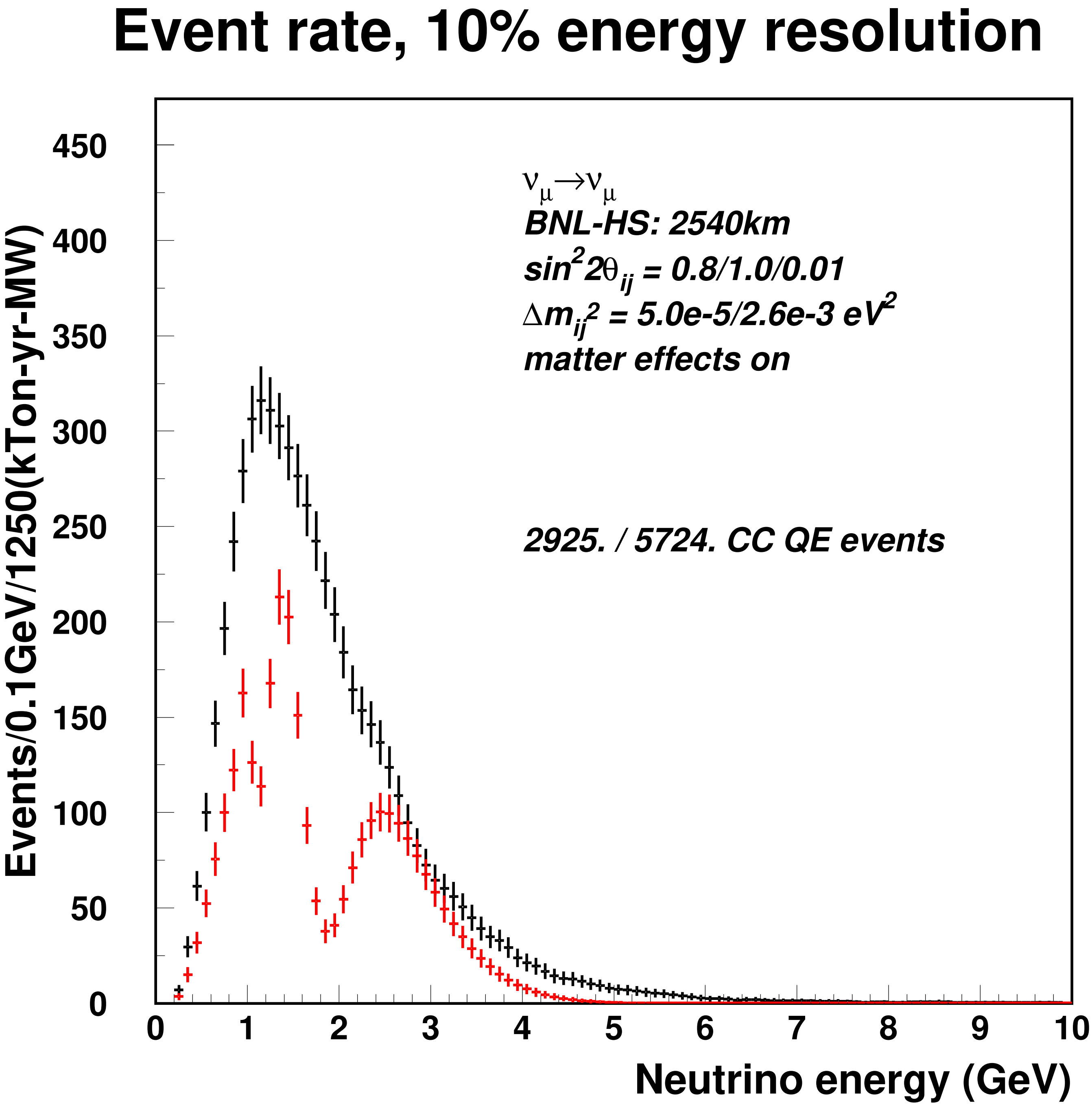


Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_e$
BNL-HS: 2540km
$\sin^2 2\theta_{ij}$ = 0.8/1.0/0.04
Δm_{ij}^2 = 5.0e-5/2.6e-3 eV^2
matter effects on
86.4 QE CC events
Events/0.5GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
5
10
15
20
25
0
1
2
3
4
5
6
7
8
9
10

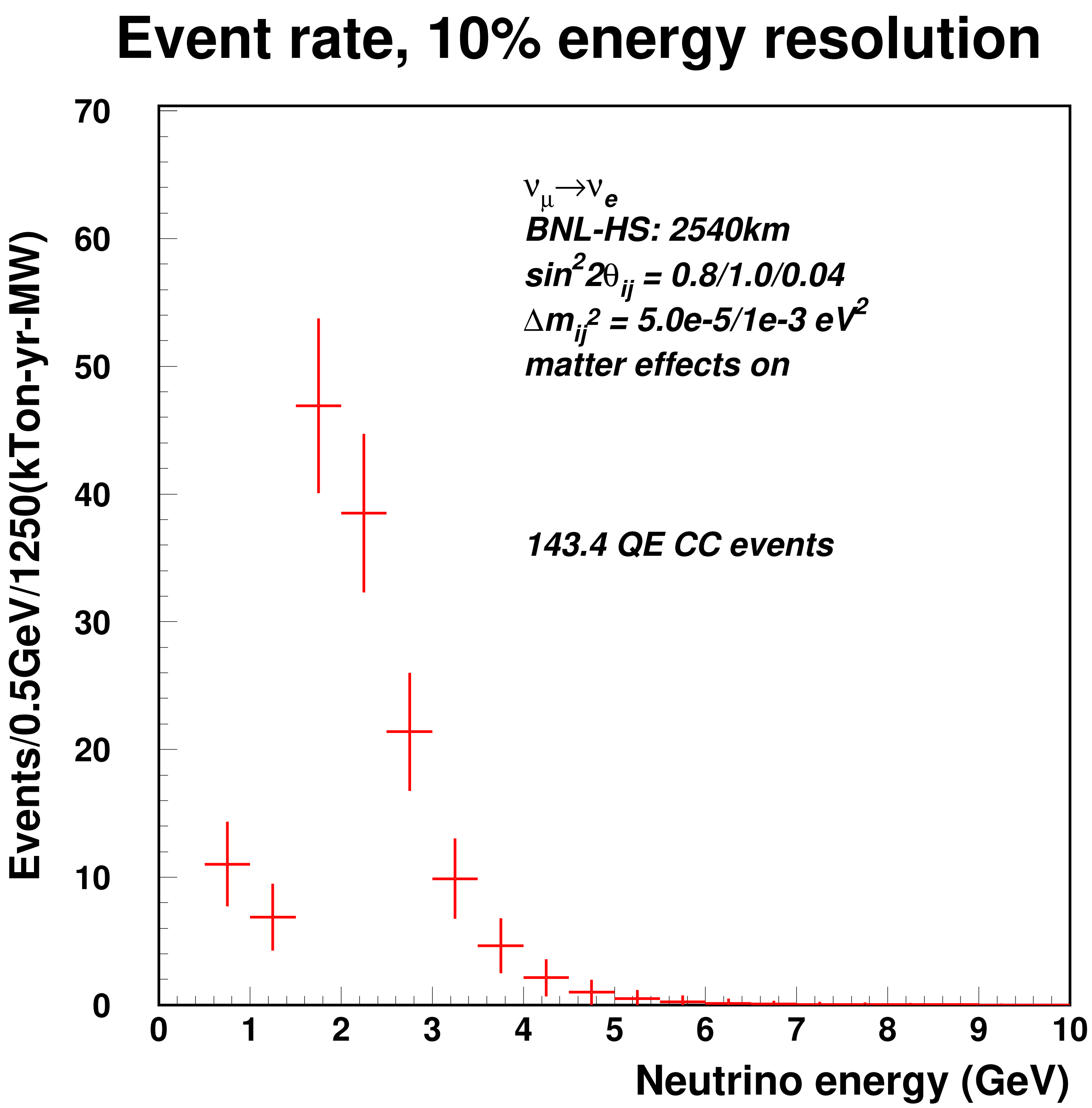
Event rate, 10% energy resolution



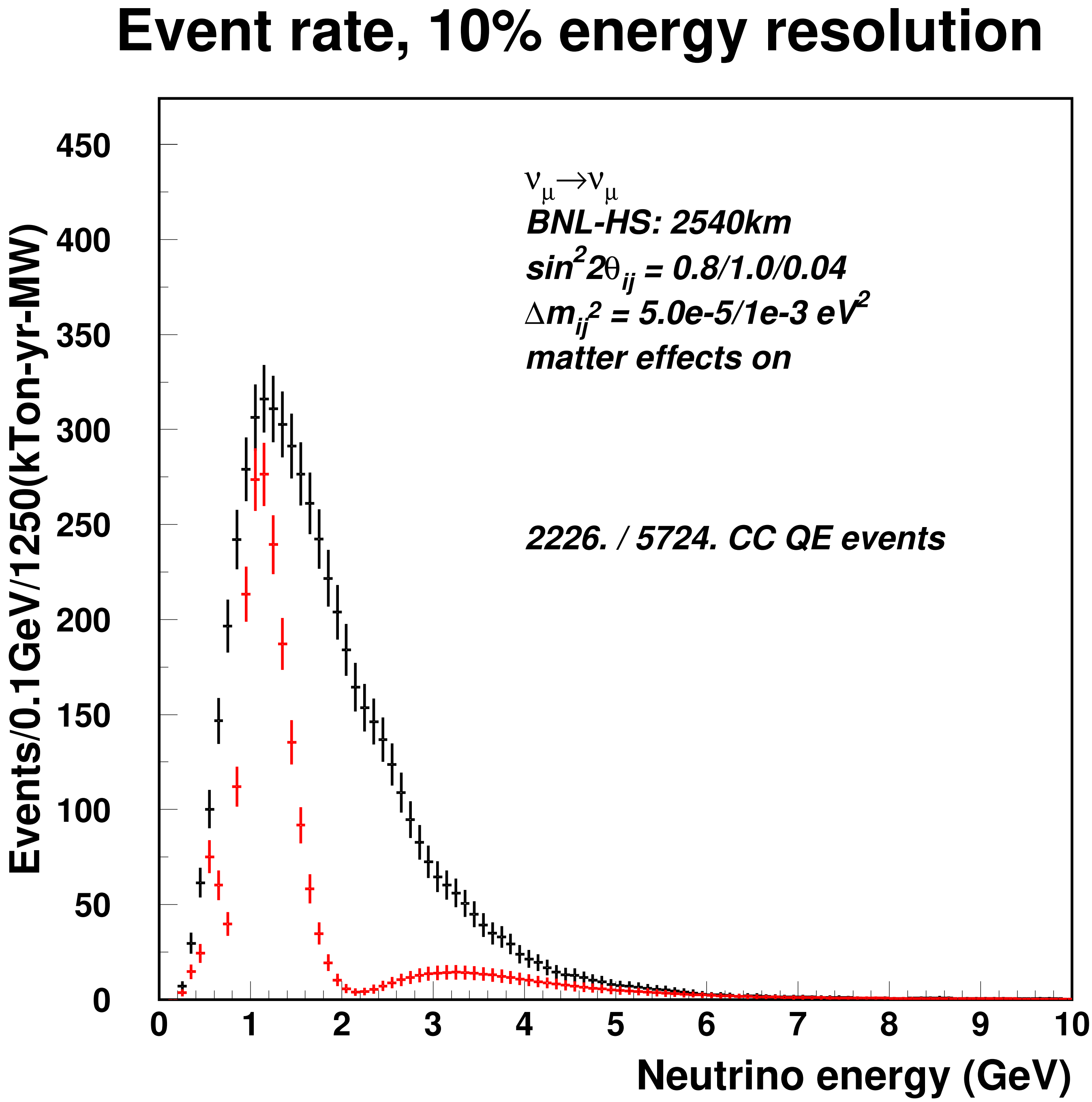

Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_e$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.01
Δm_{ij}^2 = 5.0e-5/2.6e-3 eV^2
matter effects on
38.4 QE CC events
Events/0.5GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
2.5
5
7.5
10
12.5
15
17.5
20
0
1
2
3
4
5
6
7
8
9
10



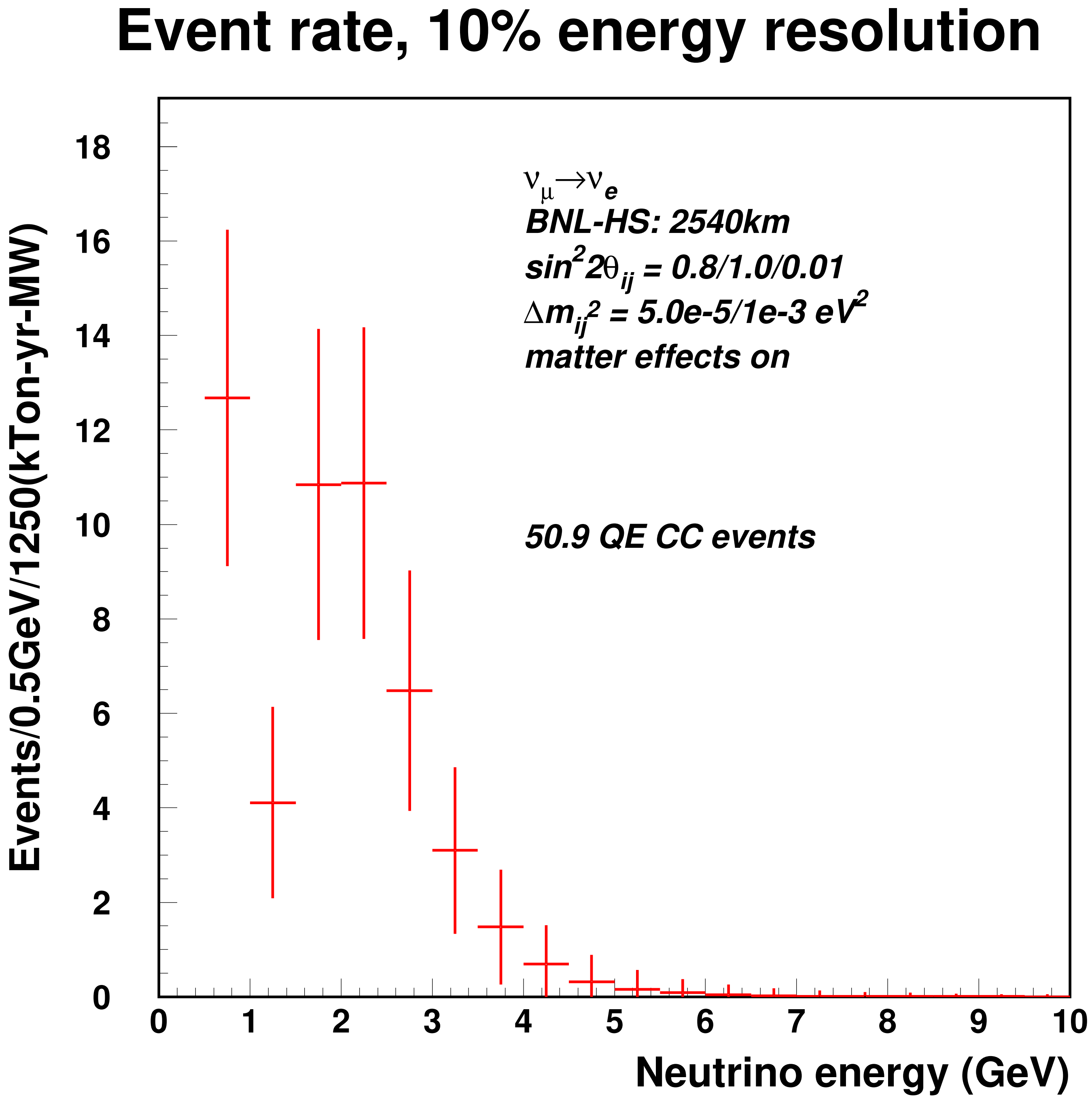
Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_\mu$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.01
Δm_{ij}^2 = 5.0e-5/2.6e-3 eV^2
matter effects on
2925. / 5724. CC QE events
Events/0.1GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
50
100
150
200
250
300
350
400
450
1
2
3
4
5
6
7
8
9
10

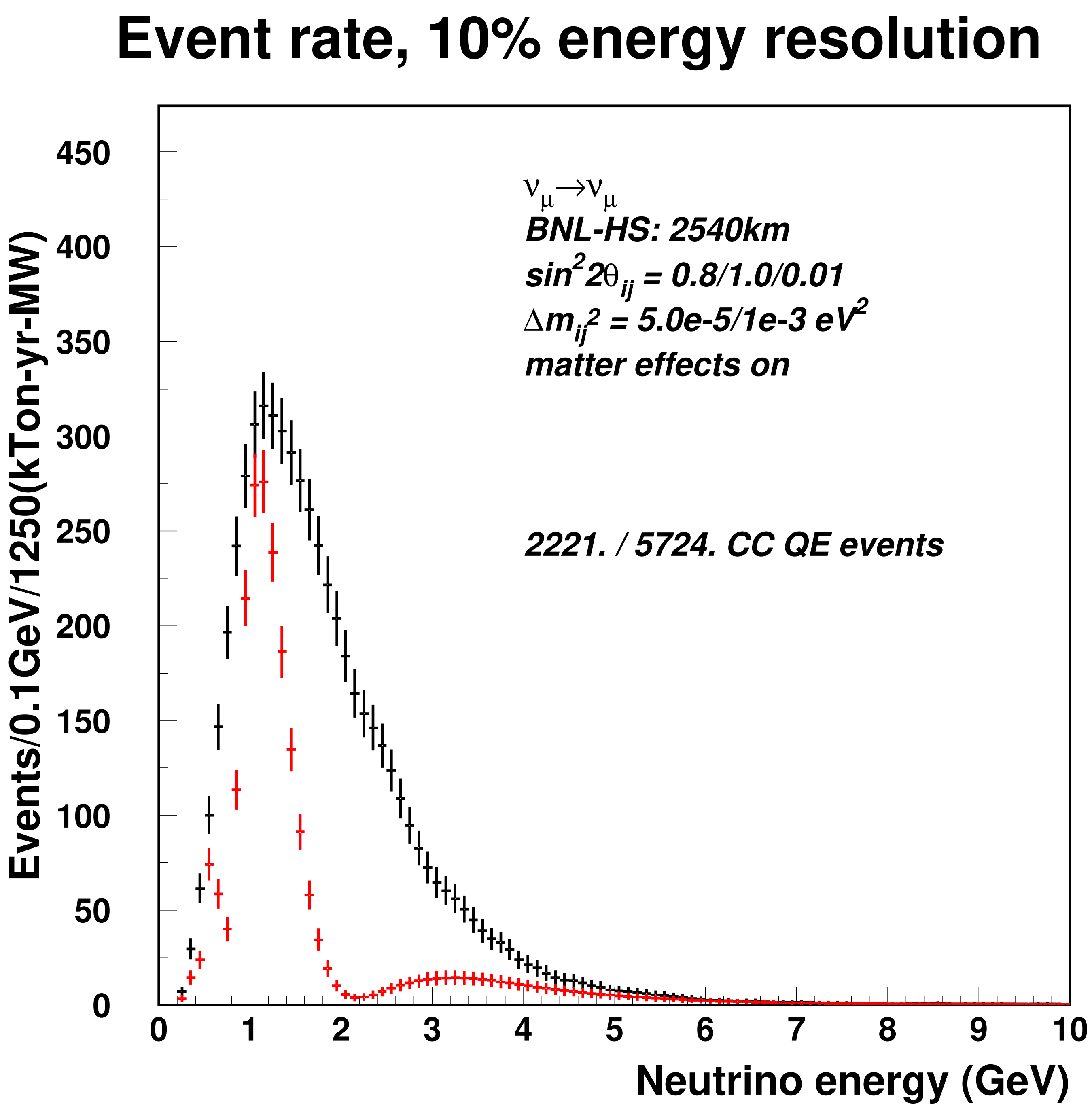


Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_e$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.04
Δm_{ij}^2 = 5.0e-5/1e-3 eV^2
matter effects on
143.4 QE CC events
Events/0.5GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
10
20
30
40
50
60
70
0
1
2
3
4
5
6
7
8
9
10



Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_\mu$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.04
Δm_{ij}^2 = 5.0e-5/1e-3 eV^2
matter effects on
2226. / 5724. CC QE events
Events/0.1GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
50
100
150
200
250
300
350
400
450
0
1
2
3
4
5
6
7
8
9
10


Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_e$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.01
Δm_{ij}^2 = 5.0e-5/1e-3 eV^2
matter effects on
50.9 QE CC events
Events/0.5GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
2
4
6
8
10
12
14
16
18
0
1
2
3
4
5
6
7
8
9
10



Event rate, 10% energy resolution
$\nu_\mu \rightarrow \nu_\mu$
BNL-HS: 2540km
$sin^2 2\theta_{ij}$ = 0.8/1.0/0.01
Δm_{ij}^2 = 5.0e-5/1e-3 eV^2
matter effects on
2221. / 5724. CC QE events
Events/0.1GeV/1250(kTon-yr-MW)
Neutrino energy (GeV)
0
50
100
150
200
250
300
350
400
450
0
1
2
3
4
5
6
7
8
9
10