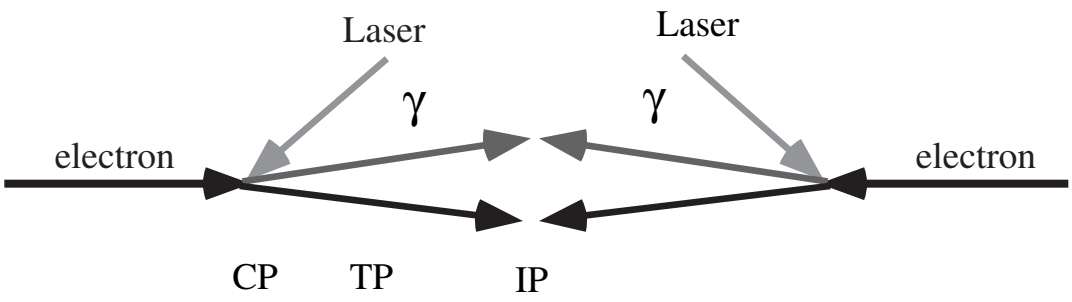

Fig. 1

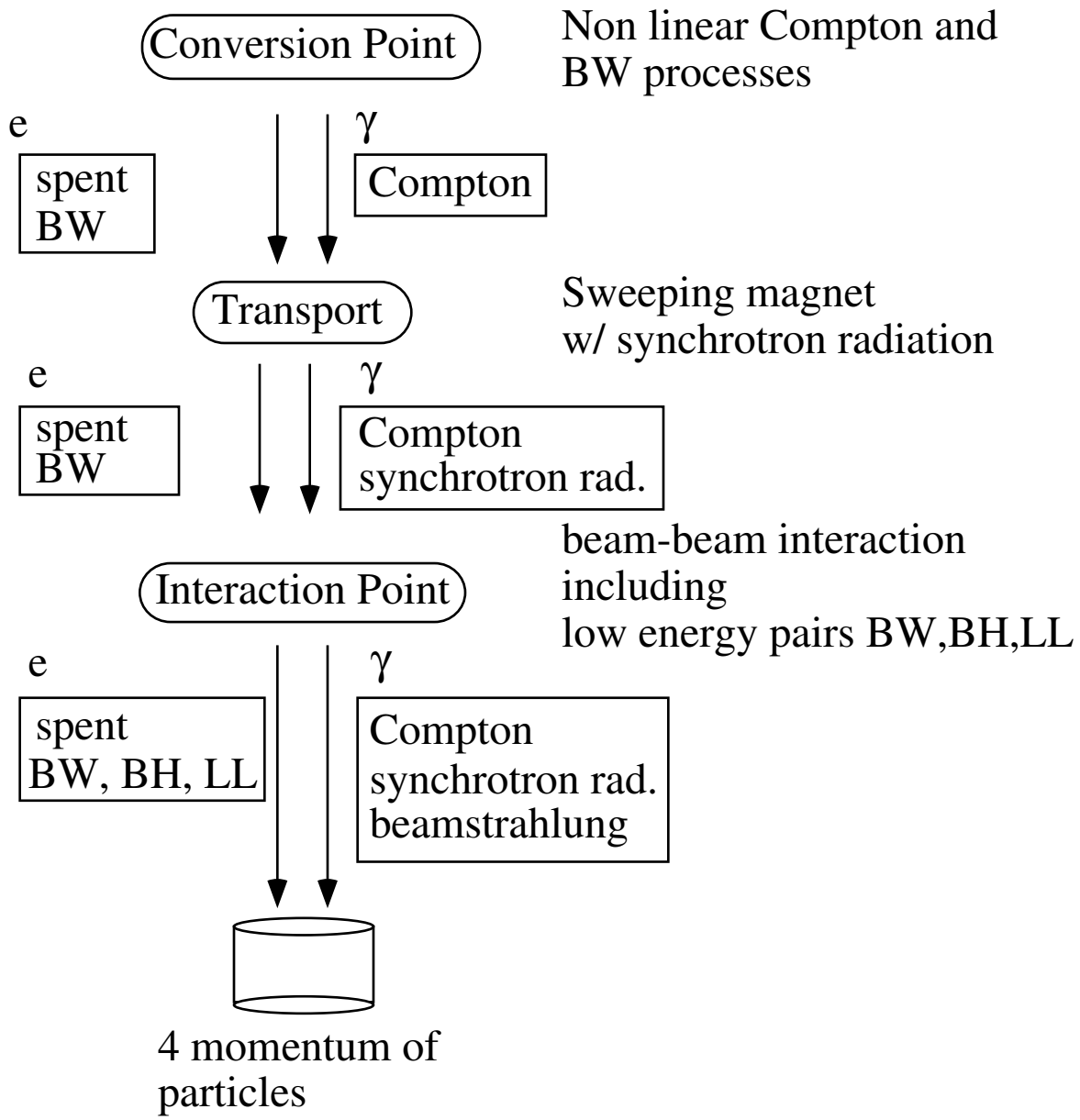
Conversion Point
Non linear Compton and
BW processes
e
γ
spent
BW
Compton
Transport
Sweeping magnet
w/ synchrotron radiation
e
γ
spent
BW
Compton
synchrotron rad.
beam-beam interaction
including
low energy pairs BW,BH,LL
Interaction Point
e
γ
spent
BW, BH, LL
Compton
synchrotron rad.
beamstrahlung
4 momentum of
particles

Fig. 2

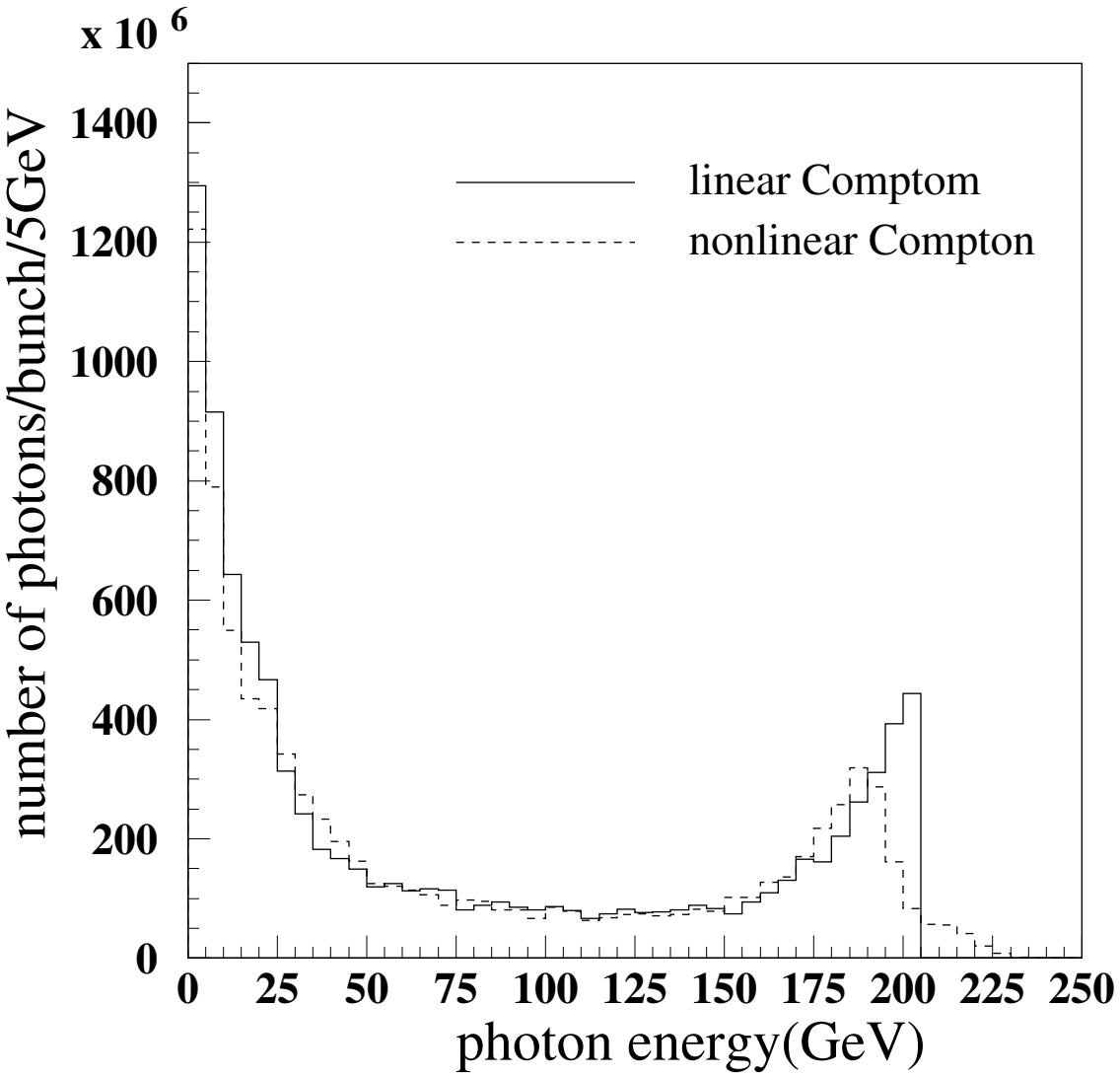
x 10 6
1400
1200
1000
800
600
400
200
0
number of photons/bunch/5GeV
linear Comptom
nonlinear Compton
0
25
50
75
100
125
150
175
200
225
250
photon energy(GeV)

Fig.3

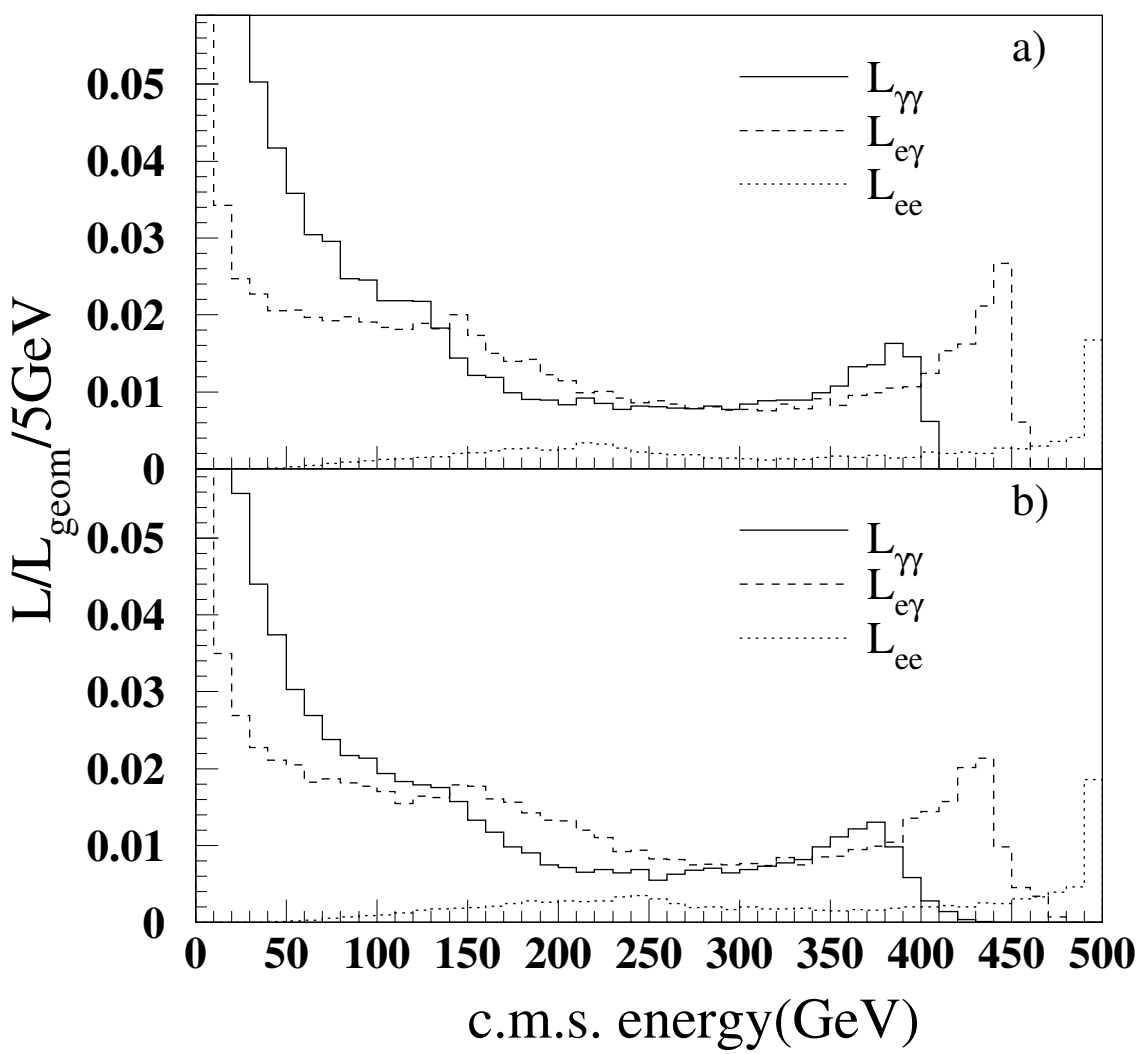
a)
b)
$L_{\gamma\gamma}$
$L_{e\gamma}$
L_{ee}
L/L_{geom}/5GeV
0.05
0.04
0.03
0.02
0.01
0
0 50 100 150 200 250 300 350 400 450 500
c.m.s. energy(GeV)

Fig.4

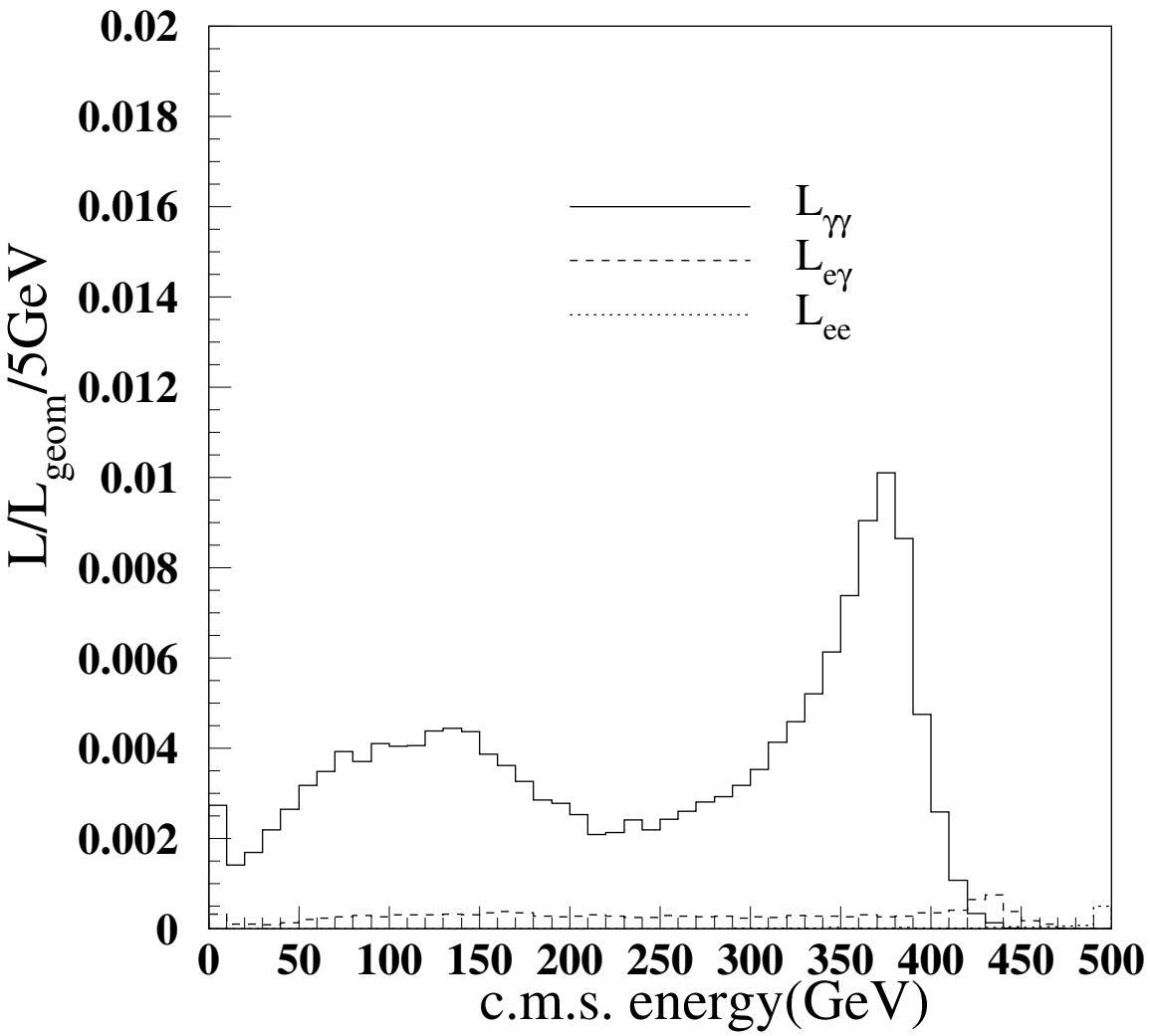
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
L/L_geom/5GeV
L_γγ
L_eγ
L_ee
0
50
100
150
200
250
300
350
400
450
500
c.m.s. energy(GeV)

Fig.5

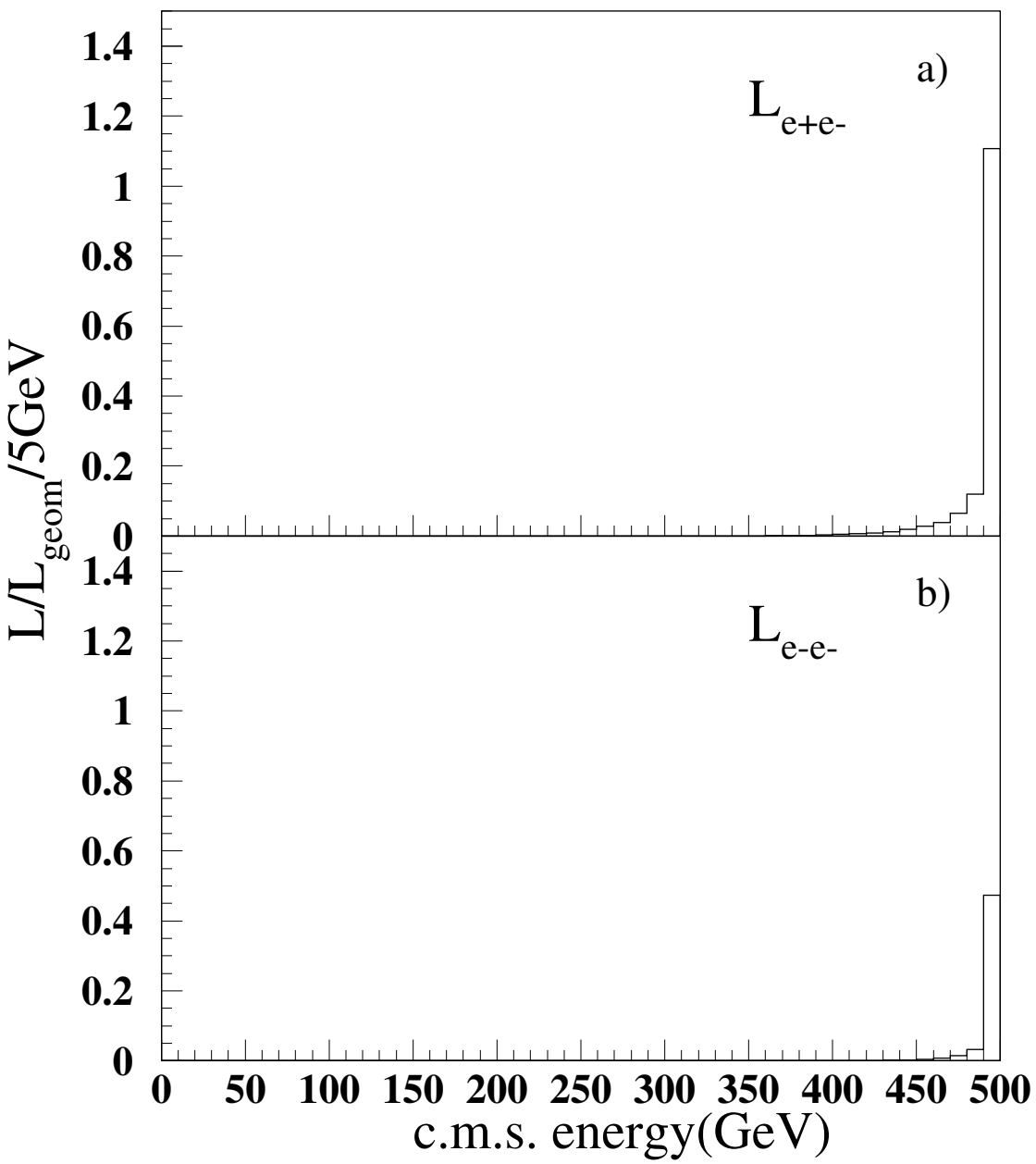
a)
L_{e+e-}
b)
L_{e-e-}
$L/L_{geom}/5GeV$
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0 50 100 150 200 250 300 350 400 450 500
c.m.s. energy(GeV)

Fig.6