Erratum: Pair production and bremsstrahlung of charged leptons*
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Page 820:

In Eq. (3.3), $n(n^2+z)$ should read $1/[n(n^2+z)]$.

In Eq. (3.5), $-\frac{4lx(1-x)}{(1+l)^4}$ should read $+\frac{4lx(1-x)}{(1+l)^4}$.

Page 822:

In Eq. (3.18), $\frac{1}{6}(1+B^2)^2$ should read $\frac{1}{6}/(1+B^2)^2$.

In Eq. (3.19), $-4B^2\ln(1+B^2)+\frac{4}{3}(1+B^2)-\frac{1}{6}(1+B^2)^2$ should read

$$-4B^{-2}\ln(1+B^2)+\frac{4}{3}/(1+B^2)-\frac{1}{6}/(1+B^2)^2\ .$$

In Eq. (3.25), $\frac{1}{6}(1+C^{-2})$ should read $\frac{1}{6}/(1+C^{-2})$.

Page 826:

In Table III.5, $\sigma(\infty)$ for H should read 20.56 mb instead of 20.73 mb.

Page 829:

In Eq. (3.76), $\left(1+\frac{b}{c}\right)$ should read $\left(1-\frac{b}{c}\right)$.

Page 834:

In Eq. (4.12), $\frac{1}{k}\frac{\cdots}{k[\quad]}$ should read $\frac{1}{k}\frac{\cdots}{[\quad]}$.

Page 838/839:

In Table V.1 (C) and (D), the entries in the first column are momentum p in GeV not $p\theta/m$.

Page 848:

5. *Sample atomic form factors*

should read

5. *Simple atomic form factors*

Page 849:

In Eq. (B55), Q should read Q^2.

Programming error: In the computer program for evaluating the contribution from the inelastic excitation of the proton, the integration routine with respect to m_f^2 in Eq. (2.7) was inadvertently carried out in such a way that finer mesh was used for larger m_f^2 instead of the other way. This resulted in underestimating the cross sections in all the entries labeled "proton inelastic" in Tables V.1, V.2, V.3, V.4, and V.5. The corrected versions for these entries are given below.

TABLE V.3. $d\sigma/dp$ (cm^2/GeV).

p (GeV)	Proton inelastic	p (GeV)	Proton inelastic	p (GeV)	Proton inelastic	p (GeV)	Proton inelastic
$m=0.1056$ GeV $k=20$ GeV		$m=0.1056$ GeV $k=200$ GeV		$m=4.0$ GeV $k=200$ GeV		$m=6.0$ GeV $k=200$ GeV	
	10^{-34}		10^{-35}		10^{-38}		10^{-40}
1.99	5.049	20.0	7.024	19.5	0.079	19.2	0.0
5.97	4.832	60.0	6.514	58.5	1.407	57.5	3.029
9.95	4.479	100.0	6.370	97.5	1.811	95.8	7.211
13.93	4.410	140.0	7.031	136.5	1.326	134.2	3.359
17.90	3.524	180.0	7.657	175.5	0.098	172.5	0.0

*Work supported by the ERDA.

TABLE V.2. $d\sigma/d\Omega dp$ for photoproduction of heavy leptons (cm^2/GeV/sr).

$p\theta/m$	Proton inelastic	Proton inelastic
	(A) $k=200, m=4.0$	(B) $k=200, m=6.0$
	$P=40$	$P=40$
0	8.458D-37	7.255D-39
0.2	7.509D-37	4.991D-39
0.4	5.206D-37	1.400D-39
0.6	2.762D-37	8.436D-41
0.8	1.084D-37	0.0
1.0	2.906D-38	0.0
	$P=80$	$P=80$
0	4.827D-36	1.771D-37
0.2	4.476D-36	1.507D-37
0.4	3.509D-36	8.756D-38
0.6	2.275D-36	3.022D-38
0.8	1.215D-36	4.847D-39
1.0	5.353D-37	1.856D-40
	$P=120$	$P=120$
0	1.029D-35	3.545D-37
0.2	9.529D-36	3.000D-37
0.4	7.452D-36	1.716D-37
0.6	4.813D-36	5.758D-38
0.8	2.558D-36	8.702D-39
1.0	1.118D-36	2.689D-40
	$P=160$	$P=160$
0	1.011D-35	4.488D-38
0.2	8.925D-36	2.826D-38
0.4	6.081D-36	5.347D-39
0.6	3.128D-36	6.358D-42
0.8	1.166D-36	0.0
1.0	2.859D-37	0.0

TABLE V.4. Total heavy lepton production cross section (cm^2).

k	Proton inelastic	Be total
$m=0.105$	10^{-32}	10^{-30}
20	0.849	1.795
40	1.060	2.276
100	1.271	2.817
200	1.349	3.026
$m=0.5$	10^{-33}	10^{-32}
20	0.430	1.733
40	0.764	3.190
100	1.274	5.668
200	1.638	7.764
$m=1.0$	10^{-34}	10^{-32}
20	0.322	0.087
40	0.959	0.247
100	2.327	0.646
200	3.598	1.080
$m=2.0$	10^{-35}	10^{-34}
40	0.267	0.644
100	2.002	3.986
200	4.627	9.600
$m=4.0$	10^{-36}	10^{-35}
100	0.169	0.400
200	1.886	3.415
$m=6.0$	10^{-38}	10^{-36}
100	0	0
200	5.123	1.138

TABLE V.5. Total heavy lepton production cross section (cm^2) from proton.

Photon energy (GeV)	Proton elastic	Proton inelastic	Proton total
$m=5$			
500	4.043D-36	3.208D-36	7.251D-36
1000	9.592D-36	7.577D-36	1.733D-35
1500	1.404D-35	1.078D-35	2.482D-35
2000	1.767D-35	1.324D-35	3.091D-35
$m=10$			
500	2.111D-38	1.241D-38	3.352D-38
1000	2.702D-37	2.184D-37	4.886D-37
1500	6.325D-37	5.361D-37	1.169D-36
2000	1.014D-36	8.625D-37	1.877D-36
$m=15$			
1000	4.563D-39	2.801D-39	7.364D-39
1500	3.528D-38	2.658D-38	6.186D-38
2000	8.860D-38	7.163D-38	1.602D-37
$m=20$			
1000	4.860D-43	1.608D-43	6.468D-43
1500	6.616D-40	3.855D-40	1.047D-39
2000	5.328D-39	3.705D-39	9.033D-39

TABLE V.1. $d\sigma/d\Omega dp$ for photoproduction of muon (cm^3/GeV/sr).

$p\theta/m$	Proton inelastic	Proton inelastic	p (GeV)	Proton inelastic	p (GeV)	Proton inelastic
	(A) $k=20, m=0.1056$	(B) $k=200, m=0.1056$		(C) $k=20, m=0.1056$		(D) $k=200, m=0.1656$
	$P=4.0$	$P=40.0$		$\theta=0.0$		$\theta=0.0$
0	1.138D-31	1.331D-30	2	2.842D-32	20	3.277D-31
0.5	8.348D-32	9.853D-31	4	1.138D-31	40	1.331D-30
1.0	4.559D-32	5.500D-31	6	2.488D-31	60	3.004D-30
2.0	1.456D-32	1.925D-31	8	4.278D-31	80	5.373D-30
4.0	2.473D-33	4.311D-32	10	6.461D-31	100	8.502D-30
7.0	3.090D-34	8.377D-33	12	8.966D-31	120	1.249D-29
10.0	4.996D-35	2.271D-33	14	1.161D-30	140	1.741D-29
15.0	2.193D-36	4.020D-34	16	1.383D-30	160	2.314D-29
20.0	2.002D-38	1.010D-34	18	1.356D-30	180	2.828D-29
	$P=8.0$	$P=80.0$		$\theta=0.1$		$\theta=0.1$
0	4.278D-31	5.373D-30	2	4.118D-33	20	2.423D-35
0.5	3.028D-31	3.828D-30	4	2.928D-33	40	2.141D-36
1.0	1.593D-31	2.032D-30	6	1.733D-33	60	2.215D-37
2.0	5.196D-32	7.014D-31	8	1.020D-33	80	6.204D-39
4.0	9.707D-33	1.610D-31	10	6.120D-34	100	0.0
7.0	1.412D-33	3.180D-32	12	3.576D-34	120	0.0
10.0	2.804D-34	8.859D-33	14	1.756D-34	140	0.0
15.0	2.372D-35	1.689D-33	16	4.363D-35	160	0.0
20.0	1.477D-36	4.636D-34	18	0.0		
	$P=12.0$	$P=120.0$		$\theta=0.2$		$\theta=0.2$
0	8.966D-31	1.249D-29	2	6.618D-34	20	1.078D-37
0.5	6.363D-31	8.911D-30	4	2.160D-34	40	0.0
1.0	3.378D-31	4.756D-30	6	6.896D-35	60	0.0
2.0	1.129D-31	1.655D-30	8	2.208D-35	80	0.0
4.0	2.193D-32	3.764D-31	10	5.569D-36	100	0.0
7.0	3.357D-33	7.400D-32	12	5.355D-37	120	0.0
10.0	6.952D-34	2.093D-32	14	0.0		
15.0	6.158D-35	4.121D-33	16	0.0		
20.0	3.935D-36	1.161D-33	18	0.0		
	$P=16.0$	$P=160.0$				
0	1.383D-30	2.314D-29				
0.5	1.024D-30	1.721D-29				
1.0	5.759D-31	9.726D-30				
2.0	1.977D-31	3.445D-30				
4.0	3.769D-32	7.509D-31				
7.0	5.396D-33	1.450D-31				
10.0	9.682D-34	4.086D-32				
15.0	4.810D-35	7.867D-33				
20.0	4.932D-37	2.121D-33				

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