

Erratum

**The total virtual photoabsorption cross section,
 deeply virtual Compton scattering and vector-meson production**

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1. The left-hand side of (2.25) should read

$$\sigma_{(q\bar{q})_{T,L}^{J=1P}}(r_{\perp}^2, W^2).$$

2. In the third line after (2.34), (2.21) should read (2.24).

3. We have found a coding error in the computer program, which affects some of the cross sections of the massive vector-meson production. The sentences between (4.42) and (4.43) starting with “For J/Ψ production,” should read:

For J/Ψ production, for $Q^2 + M_{J/\Psi}^2 \geq 25 \text{ GeV}^2$, the approximation (4.37) overestimates the result from (4.39) by about 15 %. For the case of Υ production, for $Q^2 \cong 0$, for later reference we note that the approximate result from (4.37) is about 30% larger than the result of the exact evaluation.

Table 1 changes as follows:

V	$R(\rho^0)/R^{(V)}$	M_V (GeV)	ΔM_V^2 (GeV ²)	m_q (GeV)	$E_{\text{appr.}}^{(V)}$	$E^{(V)}$
ρ^0	1	0.77	1.0	0	—	—
J/ψ	$\frac{9}{8}$	3.096	3.0	1.5	1.34	1.32
Υ	$\frac{9}{2}$	9.460	11.0	4.6	3.29	2.99

The last two sentences in Sect. 4.2 should read:

The deviation from the results from (4.43) for the J/Ψ is small, since the excesses of the approximation (4.10) for the ρ^0 meson and of the approximation (4.37) for the J/Ψ meson with respect to the exact result cancel. The larger deviation in the case of the Υ is largely due to the above mentioned 30% deviation of the approximation from the exact result.

4. Correspondingly, the right-hand sides of (4.50) and (4.51) change as

$$\frac{9}{8}\sigma^{(J/\Psi)}/\sigma^{(\rho^0)} = 1.28, \quad (4.50)$$

$$E^{(\Upsilon)} = \frac{9}{2}\sigma^{(\Upsilon)}/\sigma^{(\rho^0)} = 2.99, \quad (4.51)$$

respectively.

5. In Sect. 4.4, in the second paragraph,

$$(1/Q^2)^6 \alpha_s(Q^2) xg(x, Q^2)$$

and

$$(1/Q^6) \sigma^{(\infty)} \Lambda^2(W^2)$$

should read

$$(1/Q^2)^6 \left[\alpha_s(Q^2) xg(x, Q^2) \right]^2$$

and

$$(1/Q^6) \left[\sigma^{(\infty)} \Lambda^2(W^2) \right]^2,$$

respectively.