

**Erratum: Simulation of the electron-cloud build up and its consequences on heat load, beam stability, and diagnostics**  
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Table I, as it appears in our original paper, contains three mistakes. (i) Obviously, the typical bunch population for the Large Hadron Collider is  $1.05 \times 10^{11}$  protons, not positrons ( $e^+$ ). (ii) The emittance values reported in the table did not actually refer to the horizontal and vertical planes, but to injection and collision. In the corrected table, the only value at collision energy is reported, and this is the same for both  $x$  and  $y$ . (iii) The horizontal and vertical half-apertures are 2.2 and 1.8 cm, not 2.2 and 1.8 mm.

Therefore, the correct table for the LHC parameters is as follows.

Because the simulations were carried out using the correct values, the mistakes that were contained in Table I do not affect the results presented in the paper.

TABLE I. Overview on LHC parameters essential for the simulation.

Circumference	26 658.883 m
Relativistic $\gamma$	7461
Bunch population	$1.05 \times 10^{11}$ protons
Physical emittances ( $\epsilon_{x,y}$ )	0.503, 0.503 nm rad
Tunes ( $Q_{x,y,s}$ )	63.28, 63.31, 0.002 12
rms beam sizes ( $\sigma_{x,y,z}$ )	0.303, 0.303, 77 mm
Spacing between bunches	7.48 m
rms energy spread	0.111
Mom. compaction factor	$\alpha = 3.47 \times 10^{-4}$
Horizontal and vertical half-apertures	2.2, 1.8 cm