

ERRATUM

Erratum to: Prospects for rare and forbidden hyperon decays at BESIII

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In the original publication of the article, there is one typo in Table 6 and the upper part of Table 8 should be removed. Below are the correct versions of Tables 6 and 8.

Table 6 Present status of branching fractions (\mathcal{B}) and asymmetry parameters (α_γ) for the radiative hyperon decays from PDG2016 [3]. Neither the branching fraction nor the asymmetry parameter for $\Sigma^0 \rightarrow n\gamma$ has been measured owing to its huge electromagnetic partial width. “–” indicates “not available”.

$B_i \rightarrow B_f \gamma$	$\mathcal{B} (\times 10^{-3})$	α_γ
$\Lambda \rightarrow n\gamma$	1.75 ± 0.15	–
$\Sigma^+ \rightarrow p\gamma$	1.23 ± 0.05	-0.76 ± 0.08
$\Sigma^0 \rightarrow n\gamma$	–	–
$\Xi^0 \rightarrow \Lambda\gamma$	1.17 ± 0.07	-0.70 ± 0.07
$\Xi^0 \rightarrow \Sigma^0\gamma$	3.33 ± 0.10	-0.69 ± 0.06
$\Xi^- \rightarrow \Sigma^-\gamma$	0.127 ± 0.023	1.0 ± 1.3
$\Omega^- \rightarrow \Xi^-\gamma$	< 0.46 (90% C.L.)	–

Table 8 Lepton- or baryon-number-violating hyperon decays and expected sensitivities with 10^{10} events on the J/ψ peak and 3×10^9 events on the $\psi(2S)$ peak. The current data are from CLAS [68] as listed in PDG2016 [13]. “–” indicates “not available,” $l = e$ or μ , and M^\pm refers to the charged stable mesons ($M^\pm = \pi^\pm$ or K^\pm). Each reaction shows evidence of $\Delta L = \pm 1$ or/and $\Delta B \neq 0$, and each reaction conserves electric charge and angular momentum.

Decay mode	Current data $\mathcal{B} (\times 10^{-6})$ (90% C.L.)	Sensitivity $\mathcal{B} (\times 10^{-6})$	ΔL	ΔB
$\Lambda \rightarrow M^+ l^-$	$< 0.4\text{--}3.0$ [68]	< 0.1	+1	–1
$\Lambda \rightarrow M^- l^+$	$< 0.4\text{--}3.0$ [68]	< 0.1	–1	–1
$\Lambda \rightarrow K_S \nu$	< 20 [68]	< 0.6	+1	–1
$\Sigma^+ \rightarrow K_S l^+$	–	< 0.2	–1	–1
$\Sigma^- \rightarrow K_S l^-$	–	< 1.0	+1	–1
$\Xi^- \rightarrow K_S l^-$	–	< 0.2	+1	–1
$\Xi^0 \rightarrow M^+ l^-$	–	< 0.1	+1	–1
$\Xi^0 \rightarrow M^- l^+$	–	< 0.1	–1	–1
$\Xi^0 \rightarrow K_S \nu$	–	< 2.0	+1	–1

*The online version of the original article can be found at:
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