CORRIGENDUM on the book "Quandle and topological pairs" at 2021/07/22

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I give a list of errata in the book "Quandle and topological pairs". I am terribly sorry that some readers became confused by the errors.

Errors in the 111-th page

The 111-th page in the book contains many errors. In fact, Propositions B.12 and 15 are incorrect (which is pointed out by Kentaro Yonemura (Kyushu university). I sincerely thank him). Furthermore, the definition of presentations of quandles is not fine. In fact, more explicit and accurate definition is described in Section 8 of the following book;

S. Kamada, "Surface-Knots in 4-Space, An introduction" Springer Monographs in Mathematics. Springer, Singapore, 2017.

[MP] A. Miller and M. Powell, Symmetric chain complexes, twisted Blanch eld pairings and knot concordance. Algebr. Geom. Topol., 18(2018), 34253476

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Page and line	Original statement	correct statement
P. 5, l.10	exists $n \in \mathbb{Z}$	exists $n \in \mathbb{N}$
P. 6, l.14	qd'l	q'dl . This is an abbreviation like bunc
P. 22, l.9	The proof is incorrect	since Prop B.15 is not true. But, Prop 3.7 is a well-known fact; see,
P. 25, l.7	π_L	This is an abbreviation of $\pi_1(S^3 \setminus L)$
P. 33, §4.1	See Sect. 5.1)	(See Sect. 5.1)
§4.2	diagrams should be reduced [2]	See also [MP] below
P. 35, l. 1	D : diagram	D: reduced diagram
P. 40, l. 14	or meridians.	and meridians.
P. 40, l. 15	two coloring	two colorings
P. 47, l. 13	us construct $\mathfrak{s}_n$	us construct such a $\mathfrak{s}_n$
P. 65, l. 4	universal covering	universal covering space
P. 80, §8.2	π_L	This is an abbreviation of $\pi_1(S^3 \setminus L)$
P. 87, l. -10	By Theorem 5.14, recall	By Theorem 6.14, recall
P. 87, l. -10	recall $H_3^{\Delta}(Q_L;\mathbb{Z}) \cong \mathbb{Z}$	recall $H_3^{Q}(Q_L;\mathbb{Z}) \cong \mathbb{Z}$
P. 87, l. -8	$\varphi_3([\mathcal{I}_{\mathrm{id}_{Q_L}}])$	$\varphi_3([Q_L])$
P. 87, l. -8	$N_L \cdot \beta(\pi_L$	$N_L \cdot \alpha(\pi_L$
P. 89, Fit. 8.3	$R \sim R \lhd a \sim R \lhd yb$	$R \sim R \lhd a \sim R \lhd b$
Prop.5.37,Exa.7.18,Appe. A etc	Atroidality	Atoroidality
lemma 8.10	$x^{n\rho}$	This should be explained after Def. 8.1
Prop. A.5	is injective, if	; $x \mapsto e_x$ is injective, if
P.91. l.-4	$Y^p - 2Z^p + (2Z - Y)^p)$	$Y^p - Z^p + (Z - Y)^p)$
P.92. l.5	$\mathrm{Ker}(\varepsilon_X)$	$\mathrm{Ker}(\varepsilon)$
P.94. l.17	$\phi_{\mathrm{Moc}}^{\Gamma}$	$\phi_{\mathrm{Moc}}^{\Gamma(q_1,q_2,q_3,q_4)}$
P.96. l.7	φ_n^*	$(\varphi_n^G)^*$
P.96. l.9	$c - c \cdot -k^{-1}$	$c - c \cdot k^{-1}$
P.103. l.-12	$\eta_{\alpha,s-1}\gamma_{\beta,s}$	$\eta_{\alpha,s-1}\eta_{\beta,s}$
P.108. l.1	we can $\mathrm{Inn}(X)$	we can compute $\mathrm{Inn}(X)$
P.108. l.3	Further, X be	Further, let X be
P.111. Prop. B.12		The statement is incorrect. In fact, there are counter examples.
P.111. Prop. B.15		The statement is incorrect.
P.112. Lemma B.17	$1 - T$ is invertible in X	The map $1 - T : X \to X$ is surjective.
p.121. Theorem C.7		We must "suppose $(\mathbb{F}_q^{\times})^2 = \mathbb{F}_q^{\times}$".
p.122. l. -2 7	$\pi_2(BQ_L) \cong \mathbb{Z}^{\sharp L} \oplus \mathbb{Z}^{\sharp L}$	$\pi_2(BQ_L) \cong \mathbb{Z}^{\sharp L} \oplus \mathbb{Z}$.