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Corrections for the books Cylindric Algebras, Part I and Part II and Cylindric Set Algebras

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Part I

Part I, p. 42, line 11 from top. At the beginning of the line, $\sigma = \tau$ in place of $\sigma \neq \tau$; at the end of the line, $\sigma \neq \tau$ instead of $\sigma = \tau$.

Part I, p. 78. The observations following Theorem 0.2.38 were not reconstructed by the authors. But G. Tardos, in 1986, did prove that there is a finitely generated pseudosimple algebra which is not simple; of course it has infinitely many operations.

Part I, p. 146_{15}: replace "gonditions" by "conditions".

Part I, p. 152^{1}: replace "=" by "$\subseteq$".

Part I, p. 158: In Problem 0.6 one should assume that α is less than the first uncountable measurable cardinal; then the consistency of a positive solution relative to the consistency of certain other axioms has been shown by Magidor and Laver (Trans. Amer. Math. Soc. 249, p. 97, unpublished respectively)

Part I, p. 171, line 13 from bottom. Replace "$\alpha \neq 0$" by "$\alpha \geq 2$".

Part I, p. 171, lines 9-11 from bottom. There are two Gs_0's; see Part II, p. 9.

Part I, p. 172, line 3 from bottom. Replace "resulst" by "results".

Part I, p. 258. It is false in general that the decision problem for the set of identities holding in all Mn_α's has an affirmative solution. See the separate comments on the problems, concerning Problem 4.11 in Part II.

Part I, p. 339. The proof of Theorem 2.5.6 is faulty; it is not true that $\mathsf{CA}_2 \subseteq \mathbf{SPK}$, as easy examples show; it does follow from 2.5.5 that $\mathsf{CA}_2 \subseteq \mathbf{HSPK}$, however, so that the theorem is still true.

Part I, p. 347. The last two lines should be replaced by the following:

$$Cr_\beta^{(\Delta)}\mathbf{K} = \bigcap\{R : R \in Co\mathfrak{Fr}_\beta, \mathfrak{Fr}_\beta/R \in \mathbf{ISK}, (c_\kappa^{(\mathfrak{Fr}_\beta)}\xi)/R = \xi/R \text{ for each } \xi < \beta \text{ and each } \kappa \in \alpha \sim \Delta\xi\};$$

Part I, p. 383, top line. Replace "implies (v)" by "implies (vi)".

Part I, p. 425, line 8 from top. Replace "$\mathfrak{B} \in \mathsf{CA}_\alpha$" by "$\mathfrak{B} \in \mathsf{CA}_\beta$".

Part I, p. 455, line 2 from bottom. Replace "$\mathfrak{B} \in \mathsf{CA}_\alpha$" by "$\mathfrak{Cm}\mathfrak{B} \in \mathsf{CA}_\alpha$".

Part I, p. 463, line 8 from bottom. Replace "$\beta > \omega$" by "$\beta < \omega$".

Part I, p. 464, line 11 from bottom. Replace "2.13" by "2.12".

Part I, p. 481, line 8 from bottom. Replace "85" by "186".

Part I, p. 495, lines 12 and 13 from bottom: Insert the following between these lines:

$At\,\mathfrak{A}$	atoms of $\mathfrak{A}$, 162, 225

Part I, p. 495, line 5 from bottom. Replace "341" by "431".

Part I, p. 499, line 14 from bottom. Replace the page reference for $\Gamma-$atom by 225ff.

Part I, p. 503. The references for Keisler should be 113, 114, 117, 153, 158, 300, 473, 484.

Part I, p. 506. The references for semisimple algebras should be 101, 152.

Part II

Part II, p. 45, 6 lines from top. "$\gamma = \sum_{\mu<\lambda}\gamma^\mu$" rather than "$\gamma \leq \sum_{\mu<\lambda}\gamma^\mu$".

Part II, p. 54. Replace Cs_1 with ICs_1 in Theorem 3.1.128.

Part II, p. 54 line 12 from the bottom. Replace $\mathsf{Cs}_\alpha^{\mathrm{reg}}$ with ${}_\infty\mathsf{Cs}_\alpha^{\mathrm{reg}}$.

Part II, p. 55, 4 lines from top. Replace "$\mathfrak{R}f$" with "$\mathfrak{Rf}$".

Part II, p. 49, last line. "${}_\lambda\mathsf{Gws}_\alpha^{\mathrm{comp}}$" rather than "${}_\lambda\mathsf{Gws}_\alpha$".

Part II, p. 52, line 9 from below. Replace "$Rg\,p \restriction y$" by "$Rg\,\rho \restriction y$".

Part II, p. 54, in the statement of 3.1.128. "ICs_1" instead of "Cs_1".

Part II, p. 54, line 11 from bottom. This should read as follows:

7.2. For example, $\mathsf{I}_\infty\mathsf{Cs}_\alpha = \mathbf{SUp}({}_\infty\mathsf{Cs}_\alpha^{\mathrm{reg}} \cap \mathsf{Lf}_\alpha)$ for $\alpha \geq \omega$.

Part II, p. 55, line 4 from the top. Should be: $\ldots \mathfrak{Rs}(\kappa, \alpha) \ldots$

Part II, p. 57, line 5 from the bottom. Should be: $\ldots \subseteq \mathsf{I}_\lambda\mathsf{Gs}_\alpha$ for

Part II, p. 57, line 4 from the bottom. Replace "${}_\lambda\mathsf{Cs}_\alpha$" by "${}_\lambda\mathsf{Gs}_\alpha$".

Part II, p. 68, line 19 from top. After "$x, y \in I$" add "$, x \neq y$".

Part II, p. 78, line 5 from top. Replace "(vi)" by "(vii)".

Part II, p. 101, line 8 from below. This line should read as follows:

(2) $\mathsf{s}_\kappa^\lambda \mathsf{s}_\mu^\kappa \mathsf{s}_\lambda^\mu \mathsf{c}_\lambda x = \mathsf{s}_\mu^\lambda \mathsf{s}_\kappa^\mu \mathsf{s}_\lambda^\kappa \mathsf{c}_\lambda x$ for all distinct $\kappa, \lambda, \mu < \alpha$.

Part II, p. 118, line 12 from the bottom. Should end: $\ldots \mathfrak{Nr}_\alpha \mathfrak{A} \in \mathbf{K}_\alpha$.

Part II, p. 125, just before Theorem 4.1.43. The sentence mentioned should be changed to: $\exists x(\mathsf{c}_0 x \neq x) \to \exists x(x \neq 1 \wedge \mathsf{c}_0 x = 1)$.

Part II, p. 126, line 6 from top. Replace "it" by "its".

Part II, p. 139, line 2 from below. Replace "4.2.18(iv)" by "4.2.17(iv)".

Part II, p. 147. In Remark 4.2.24. the reference should be to 4.1.22, not to 4.1.21.

Part II, p. 154, line 12 from below. Replace this line by the following:

not in the set $\{v_0, \ldots, v_{\rho\xi-1}\} \cup \{v_{\kappa 0}, \ldots, v_{\kappa(\rho\xi-1)}\}$:

Part II, p. 161, line 17 from the top. " ... with ${}_p\mathbf{Fm}$ ... " rather than " ... with ${}_r\mathbf{Fm}$".

Part II, p. 167, last line. "$Is\left({}_t\mathbf{Fm}^\Lambda_{r\Gamma}, {}_t\mathbf{Fm}^\Omega_{r\Sigma}\right)$" rather than "$Is\left({}_t\mathbf{Fm}^\Lambda_{r\Sigma}, {}_t\mathbf{Fm}^\Omega_{r\Sigma}\right)$".

Part II, p. 167, line 5 from the bottom. "$\cdots f\xi]$" rather than "$\cdots f\xi\}$".

Part II, p. 168, line 9 from the top. Replace "rather then" by "rather than".

Part II, p. 178, line 18 from the bottom. Replace "correapond" by "correspond".

Part II, p. 180, line 2 from the top. Replace "Of" by "of".

Part II, p. 199, line 4 from the top. Replace the initial "(" by "{".

Part II, p. 235, line 7 from the top. Replace this line by:

$$\mathsf{s}_\tau^{[V]} X = \{u \in {}^\alpha U : u \circ \tau \in X\}$$

Part II, p. 243, line 15 from the top. Replace "*is*" by "*in*".

Part II, p. 246, line 9 from below. Replace "α" by "2".

Part II, p. 252, line 10 from the top. In the statement of Corollary 5.5.12, replace "Crs_α" by "ICrs_α".

Part II, p. 291, first line of actual index. After "f_u^κ" put "$,f(\kappa/u)$".

Part II, p. 300, line 5 from below: replace "61ff" by "60ff".

Part II, p. 301: add at the appropriate place:

schema of equations, 110

Cylindric Set Algebras

CSA, p. 65[11]: $q(\alpha, \alpha \cdot \beta) \geq \log \cdots$.

CSA, p. 93$_3$: $\cdots$ iff $p_\kappa = w_\kappa / \overline{F}$, and hence $\cdots$.

CSA, p. 96$_1$: $\cdots$ is regular in $\mathfrak{A}_{\mathfrak{B}}$, and

CSA, p. 106[10–11]: $\cdots V_i \cap V_j$ for all distinct $i, j \in I$. Choose $ia \in I$ with $a \cap V_{ia} \neq 0$ for all....

CSA, p. 128[6]: I.7.27

CSA, p. 194[6]: Let $0 \neq Q \subseteq V$,

CSA, p. 243[5]: ICs_α=$\mathrm{Gws}_\alpha^{\mathrm{comp}}$

CSA, p. 250$_9$: $\cdots$ Then ${}_\beta\mathrm{Gws}_\alpha^{\mathrm{comp}} \subseteq \cdots$

CSA, p. 275[1]: hull of $\mathsf{Nr}_\alpha \mathrm{Gs}_\beta \cdots$

CSA, p. 303[10]: bl. $\mathbf{Uf}\,\mathbf{Up} L_\alpha = \mathbf{Uf}\,\mathbf{Up}\,\mathbf{Rd}_\alpha L_\beta$.

CSA, p. 311[12]: $\mathrm{rq}^+(\alpha) \geq \alpha + 1 + \cdots$

CSA, p. 311[13]: $\ldots q(\alpha, \beta) \leq \lceil \log_2(\beta - \alpha + 1) \rceil$

CSA, p. 311[14]: $\ldots$ for $\alpha \in H \cap 5$, and $\ldots q^+(\alpha) \leq 1.5\alpha \ldots$

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