ERRATUM

for *Topics in Spectral Geometry*, preliminary online version dated May 29, 2023

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deletions are shown in red, and additions/replacements in green

☞ **p. 13, line 3:** replace "rises" by "raises"

☞ **p. 13, formula (1.2.24) and the following displayed formula:** in the direct sums, replace the lower summation index $\bigoplus_{m=1}^{\infty}$ by $\bigoplus_{m=0}^{\infty}$

☞ **p. 36, line 4 of the paragraph directly above the heading of §2.1.2:** replace "compact" by "closed"

☞ **p. 39, line following (2.1.5):** remove the word from "that for ~~for~~"

☞ **p.40, formula (2.1.6):** in the second integral, replace "$\mathrm{d}\sigma$" by "$\mathrm{d}s$"

☞ **p. 53, formula (2.2.3):** in the left-hand side, add a missing f to get $\|D_{te_k} f\|$

☞ **p. 76, line -3:** remove the word from "real ~~domain~~ analyticity"

☞ **p. 81, first line of Exercise 3.2.14(iii):** replace "disjoined" by "disjoint"

☞ **p. 93, lines -5 and -4:** in both places, replace "$N^{\mathrm{D}}(\lambda)$" by "$\mathcal{N}^{\mathrm{D}}(\lambda)$"

☞ **pp. 116 and 117:** as stated, Theorem 4.1.11 can be found in [Kin21, Corollary 4.31]. However, in the proof of Theorem 4.1.6 we in fact use a version from [HeiKilMar93, Theorem 4.5], which is formulated slightly differently:

Theorem 4.1.11′. *Let Ω be an open subset of $\mathbb{R}^d$. Then the function $u \in H^1(\Omega)$ belongs to $H^1_0(\Omega)$ if and only if there exists a quasi-continuous function v on $\mathbb{R}^d$ such that $v(x) = 0$ quasi-everywhere outside Ω and $v(x) = u(x)$ almost everywhere in Ω.*

In the proof of Theorem 4.1.6 (which remains unchanged), we have $u|_{\Omega_1} \in H^1(\Omega_1)$, and we construct a quasi-continuous w such that $w(x) = 0$ quasi-everywhere outside Ω_1 and

$w(x) = u(x)$ almost everywhere in Ω_1. Thus $u|_{\Omega_1} \in H_0^1(\Omega_1)$ by Theorem 4.1.11′ given above.

We thank R. L. Frank for pointing this out.

☞ **p. 118, lines 3–4:** missing subscript in "Since $\psi_i \in H_0^1(\Omega_i)$"

☞ **p. 141, second line of the second paragraph:** replace "has led" by 'have led"

☞ **p. 153, first line after the statement of Theorem 5.1.4:** replace "have measure" by "has measure"

☞ **p. 238, two lines above formula (7.1.15):** replace "$L(\Omega_k)$" by "$L(\partial\Omega_k)$"

☞ **p. 238, formula (7.1.15):** replace "$L(\Omega)$" by "$L(\partial\Omega)$"

☞ **p. 238, line following formula (7.1.15):** add the words "on any surface of genus zero with boundary"

☞ **p. 256, line -1:** replace "Exercise 7.3.6(iv)" by "Exercise 7.3.6(iii)"

☞ **p. 260, third line above Theorem 7.3.8:** replace "(7.3.8), and (7.3.8) imply" by "(7.3.8), and (7.3.9) imply"

☞ **p. 266, third line of Exercise 7.3.15:** replace "Figure 7.2" by "Figure 7.3"

☞ **p. 268, line above formula (7.4.1):** replace "$u \in H^{1/2}(\Omega)$" by "$u \in H^{1/2}(M)$"

☞ **p. 269, Definition 7.4.1:** replace "$\mathscr{D}_\Lambda : H^{1/2}(\Omega) \to H^{1/2}(\Omega)$" by "$\mathscr{D}_\Lambda : H^{1/2}(M) \to H^{1/2}(M)$"

☞ **p. 271, Exercise 7.4.3** replace the first displayed formula by

$$\begin{cases} \dfrac{\sqrt{-\Lambda}I_0'(\sqrt{-\Lambda})}{I_0(\sqrt{-\Lambda})}, & \text{if } \Lambda < 0, \\ 0, & \text{if } \Lambda = 0, \\ \dfrac{\sqrt{\Lambda}J_0'(\sqrt{\Lambda})}{J_0(\sqrt{\Lambda})}, & \text{if } \Lambda > 0, \end{cases}$$

and replace the second displayed formula by

$$\begin{cases} \dfrac{\sqrt{-\Lambda}I_m'(\sqrt{-\Lambda})}{I_m(\sqrt{-\Lambda})}, & \text{if } \Lambda < 0, \\ m, & \text{if } \Lambda = 0, \\ \dfrac{\sqrt{\Lambda}J_m'(\sqrt{\Lambda})}{J_m(\sqrt{\Lambda})}, & \text{if } \Lambda > 0, \end{cases} \qquad m \in \mathbb{N},$$

☞ **p. 277, first line of Remark 7.4.14:** replace "Theorem 7.2.11" by "Theorem 7.4.11"