Errata

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With Applications to Schrödinger Operators

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Errata

Changes appear in yellow. Line $k+$ (resp., line $k-$) denotes the kth line from the top (resp., the bottom) of a page.

Page 25. Proof of Lemma 0.27: $A = \{x | f(x) \neq 0\} = \bigcup_n A_n$

Page 50. Equation (1.49) should read:

$$\operatorname*{s-lim}_{n\to\infty} A_n = A \quad :\Leftrightarrow \quad A_n\psi \to A\psi \quad \forall \psi \in \mathfrak{D}(A) \subseteq \mathfrak{D}(A_n). \tag{1.49}$$

Page 64. Third example: In particular, if $A(x)$ is real-valued, then A_0 is essentially self-adjoint

Page 64. Last sentence of the third example: $\mathfrak{D}(A) \subseteq \mathfrak{D}(\overline{A_0})$

Page 76. Proof of Lemma 2.16: $\|R_A(z_n)\varphi_n\| \|\varphi_n\|^{-1} \to \infty$

Page 122. Theorem 4.13: $\sigma(A) \cap (\lambda_1, \lambda_2) = \{E\}$

Page 187. Last paragraph in the proof of Lemma 9.4: Then we have $\mathfrak{D} \subseteq \mathfrak{D}(A_0^{**}) = \mathfrak{D}(\overline{A}_0)$ by (9.7).

Page 190. Lemma 9.7: Then there exists a solution $u_a(z,x)$ of $(\tau - z)u = 0$ which is in $L^2((a,c), r\,dx)$

Page 200. Equation (9.48) should read:

$$S_E(\lambda) = \begin{cases} \|s(E)\|^2, & \lambda = E, \\ 0, & \lambda \neq E. \end{cases} \tag{9.48}$$

Page 207. Second paragraph in Lemma 9.22: Let $c \in (a, b)$.

Page 209. Equation (9.88) should read:

$$\varepsilon = (2\|s(\lambda)\|_{(a,x)}\|c(\lambda)\|_{(a,x)})^{-1} \tag{9.88}$$

Page 215. Equation (9.111) should read:

$$\sigma_{ac}(A) = \overline{N_a(\tau) \cup N_b(\tau)}^{ess}. \tag{9.111}$$

Page 215. Equation (9.118) should read:

$$\int_n^{n+1} |q(x)|dx \leq \left(\int_n^{n+1} |q(x)|^2 dx \right)^{1/2}. \tag{9.118}$$