Errata for Stein & Shakarchi's Complex Analysis

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- **Page 177, Exercise 11** 原文 in the strip $\{x + iy : |y| < \pi\}$ 更正 in the strip $\{x + iy : |y| < \frac{\pi}{2}\}$
- **Page 177, Exercise 11** 原文 $\hat{f}(\xi) = \Gamma(a + i\xi)$ 更正 $\hat{f}(\xi) = \Gamma(a - 2\pi i\xi)$
- **Page 179, Exercise 17** 原文 indefinitely differentiable 更正 infinitely differentiable
- **Page 179, Exercise 17** 原文 (b) Prove that $I(0) = 0$ 更正 (b) Prove that $I(0) = f(0)$
- **Page 179, Exercise 17** 原文 (b) $I(-n) = (-1)^n f^{(n+1)}(0)$ 更正 (b) $I(-n) = (-1)^n f^{(n)}(0)$
- **Page 179, Problem 1** 原文 (a) $\zeta(s) = \sum_{1 \le n < N} n^{-s} - \frac{N^{s-1}}{s-1} + \sum_{n \ge N} \delta_n(s)$ 更正 (a) $$\zeta(s) = \sum_{1 \le n < N} n^{-s} - \frac{N^{1-s}}{1-s} + \sum_{n \ge N} \delta_n(s)$$
- **Page 180, Problem 3** 原文 $\zeta(s) = \frac{s}{s-1} - \frac{1}{2} + s \int_1^\infty \frac{\{x\}}{x^{s+1}}\, dx$ 更正 $$\zeta(s) = \frac{s}{s-1} - \frac{1}{2} - s \int_1^\infty \frac{Q(x)}{x^{s+1}}\, dx$$
- **Page 180, Problem 3** 原文 $\zeta(s) = \frac{s}{s-1} - \frac{1}{2} + (-1)^k s \int_1^\infty \left(\frac{d^k}{dx^k} Q_k(x)\right) x^{-s-1}\, dx$ 更正 $$\zeta(s) = \frac{s}{s-1} - \frac{1}{2} - s \int_1^\infty \left(\frac{d^k}{dx^k} Q_k(x)\right) x^{-s-1}\, dx$$

◇ **Page 201, Exercise 4** 原文 $Q(x)=\sum_{m=0}^{q-1}a_m e^{mx}$ 更正 $Q(x)=\sum_{m=0}^{q-1}a_{q-m} e^{mx}$

◇ **Page 204, Problem 2** 原文 $\psi_1(x)=\frac{x^2}{2}-\sum_{\rho}\frac{x^{\rho}}{\rho(\rho+1)}-E(x)$ 更正 $\psi_1(x)=\frac{x^2}{2}-\sum_{\rho}\frac{x^{\rho+1}}{\rho(\rho+1)}-E(x)$

◇ **Page 204, Problem 2** 原文 $c_0=\zeta'(-1)/\zeta(-1)$. 更正 $c_0=-\zeta'(-1)/\zeta(-1)$.

◇ **Page 309, Exercise 1** 原文 the first two derivatives 更正 the first three derivatives

◇ **Page 311, Exercise 5** 原文 Use also $mx^{m-1}(1-x)<1-x^m<m(1-x)$ 更正 Use also $mx^{m-1}(1-x)\leq 1-x^m\leq m(1-x)$

◇ **Page 313, Exercise 12** 原文 the sum of the divisors of d 更正 the sum of the divisors of n

◇ **Page 314, Problem 2** 原文 $|\Im(\tau)|\geq 0$ 更正 $\Im(\tau)\geq 0$

◇ **Page 314, Problem 2** 原文 w 更正 τ'