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REGULARITY OF GROWTH AND THE CLASS S: CORRECTION

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ABSTRACT. This corrects some errors in formulas which appear in the author's paper in this journal, vol. 11, pp. 90–100 (2007).

Professor L. Rempe has noticed an error in a key formula of [1] which propogates throughout the paper. Fortunately, this does not change the statement of any of the results, but mars much of the exposition.

Using the notation of the paper, we revise (1) to read

$$M(x) = \frac{1}{2} \int_0^x (1 + h'(s)^2) \, ds,$$

unlike in its original formulation in which the integrand is raised to the power 1/2. Since the growth of the entire function f under construction is gauged with M(x), this means several later formulas need to be revised accordingly. In the following numbered formulas, the powers $\pm 1/2$ should be omitted: (11), (12) [two times], (14), (16) and (17) [twice]. The formula four lines below (14) should read

$$\exp((1/2) \int_{\log R}^{L_1(\log R)} (1 + h'(s)^2) \, ds) \sim \exp(1 + o(1))\pi h'(x) \qquad (\eta),$$

and the fourth line of the proof of Lemma 4 should be

$$M(L_1(t)) - M(t) = \pi(1 + o(1))h'(t) \qquad (\eta).$$

Finally, the seventh line of the proof of Proposition 1 should be

$$\psi(w_0 + \tau) - \psi(w_0) = (x' - x, h(x') - h(x)) + \frac{v_0 + \pi/2}{\pi} (\mathcal{L}(x') - \mathcal{L}(x)).$$

The author thanks Professor Rempe, and apologises for these errors.

References

 D. DRASIN, Regularity of growth and the class S, Conformal Geometry and Dynamics 11 (2007), 90–100. MR2314244 (2008h:30029)

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