

**ERRATUM TO “GRAFTING, PRUNING, AND THE ANTIPODAL MAP ON MEASURED LAMINATIONS”**

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Theorem 9.3 of [D] is incorrect; in the proof, the quadrilateral comparison cannot be applied directly to estimate the integral (7). However a weaker estimate follows by correcting the proof: one must use  $|\|f_*v\|^2 - \|h_*v\|^2| = |\|f_*v\| - \|h_*v\|| \|\|f_*v\| + \|h_*v\|\|$  and the Cauchy-Schwarz inequality, bounding the resulting terms by the energy difference and the total energy of  $f$  and  $h$ , respectively. This method was used by Korevaar-Schoen in [KS] (see the proof of Proposition 2.6.3) to obtain a more general estimate of the difference of pullback metrics for maps to NPC spaces, from which the following replacements for Theorem 9.3 and Corollary 9.4 of [D] follow:

**Theorem 9.3.** *Let  $f \in W^{1,2}(X, Y)$  where  $X, Y \in \mathcal{T}(S)$  and  $Y$  is given the hyperbolic metric  $\rho$ . Let  $h$  be the harmonic map homotopic to  $f$ . Then*

$$\|f^*(\rho) - h^*(\rho)\|_1 \leq \sqrt{2} (\mathcal{E}(f) - \mathcal{E}(h))^{\frac{1}{2}} \left( \mathcal{E}(f)^{\frac{1}{2}} + \mathcal{E}(h)^{\frac{1}{2}} \right)$$

and in particular

$$\|\Phi(f) - \Phi(h)\|_1 \leq \sqrt{2} (\mathcal{E}(f) - \mathcal{E}(h))^{\frac{1}{2}} \left( \mathcal{E}(f)^{\frac{1}{2}} + \mathcal{E}(h)^{\frac{1}{2}} \right).$$

**Theorem 9.4.** *Let  $f \in W^{1,2}(\tilde{X}, T_\lambda)$  be a  $\pi_1$ -equivariant map, where  $X \in \mathcal{T}(S)$  and  $\lambda \in \mathcal{ML}(S)$ . Then*

$$\|\Phi(f) + \frac{1}{4}\phi_X(\lambda)\|_1 \leq \sqrt{2} (\mathcal{E}(f) - \mathcal{E}(\pi_\lambda))^{\frac{1}{2}} \left( \mathcal{E}(f)^{\frac{1}{2}} + \mathcal{E}(\pi_\lambda)^{\frac{1}{2}} \right)$$

The main results of [D] are unaffected by these changes, since they are asymptotic in nature and the proofs only require bounds that are  $o(\mathcal{E}(h))$  when  $\mathcal{E}(f) - \mathcal{E}(h) = O(1)$  and  $\mathcal{E}(h) \rightarrow \infty$ . Only Theorem 10.1 must be revised; we have instead:

**Theorem 10.1.** *Let  $X \in \mathcal{T}(S)$  and  $\lambda \in \mathcal{ML}(S)$ . Then the Hopf differential  $\Phi_X(\lambda)$  of the collapsing map  $\kappa : X \rightarrow \text{pr}_\lambda X$  and the Hubbard-Masur differential  $\phi_X(\lambda)$  satisfy*

$$\|4\Phi_X(\lambda) - \phi_X(\lambda)\|_1 \leq C \left( 1 + E(\lambda, X)^{\frac{1}{2}} \right)$$

where  $E(\lambda, X)$  is the extremal length of  $\lambda$  on  $X$  and  $C$  is a constant depending only on  $\chi(S)$ .

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