

Corrections and clarifications to  
*Nonlinear Potential Theory on Metric Spaces*,  
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- p. 6, l. –7. Replace “ $\varepsilon$ -net” by “ $5\varepsilon$ -net”.
- p. 21, l. 13–14. Replace “Then there exist upper gradients  $g_j$  so that” by “Then there is  $\tilde{\rho} \in L^p(X)$  such that  $g_j := g + \tilde{\rho}/j$ ,  $j = 1, 2, \dots$ , are upper gradients. If moreover  $g < \infty$  a.e., then”.
- p. 21, l. 20–21. Replace the last two sentences by “Let finally  $\tilde{\rho} = \rho + \infty \chi_{g' \neq g}$  and  $g_j = g + \tilde{\rho}/j$ . Then  $g_j$  is an upper gradient of  $f$ . If moreover  $g < \infty$  a.e., then (1.6) holds.”
- p. 36. Add the sentence “Proposition 1.14 is from Cheeger [91].”
- p. 39, l. 9, 10, –4. Replace  $f_{jk}$  by  $f_{lk}$ .
- p. 46, l. 20. Delete “minimal”.
- p. 46, l. 21. Add the sentence “Moreover,  $|\varphi' \circ u|g_u$  is a minimal  $p$ -weak upper gradient of  $\varphi \circ u$ , provided that  $\varphi$  is Lipschitz,  $\varphi \circ u \in D^p(X)$  or  $|\varphi' \circ u|g_u \in L^p(X)$ .”
- p. 47, l. 1. After 2.14 add “, where the last inequality is only required to hold if  $\varphi \circ u \in D^p(X)$ ”.
- p. 47, l. 8–9. Replace these lines by “Lemma 2.14 and (2.5) imply that  $|\varphi' \circ u|g_u$  is a  $p$ -weak upper gradient of  $\varphi \circ u$ . Hence  $|\varphi' \circ u|g_u \geq g_{\varphi \circ u}$  a.e. if  $\varphi \circ u \in D^p(X)$ , which in particular holds if  $|\varphi' \circ u|g_u \in L^p(X)$ , which in turn is true if  $\varphi$  is Lipschitz. To show the minimality in this case, observe that (2.5) and (2.4) yield”
- p. 47, l. 17–18. Replace sentence by “Then  $g_u/u$  is a  $p$ -weak upper gradient of  $v = \log u$ , which is minimal if  $v \in D^p(X)$  or  $g_u/u \in L^p(X)$ .”
- p. 61, l. 10. Insert “and  $p > 1$ ” after “space”.
- p. 62, l. 13, 15. To avoid confusion between  $g_1$ ,  $g_2$  and  $g_j$ , replace  $g_j$  by  $\tilde{g}_j$ .
- p. 64, l. 14–15. Replace sentence by “Lemma 2.37 for open  $E$  appeared in [45].” (When [49] was finalized the proof of Lemma 2.37 was omitted, and so the book is the original reference for Lemma 2.37 in the general form.)
- p. 88 l. –3. Replace by

$$\begin{aligned} \infty &= \left( \int_B |u - u_B|^q d\mu \right)^{1/q} = \lim_{j \rightarrow \infty} \left( \int_B \min\{j, |u - u_B|^q\} d\mu \right)^{1/q} \\ &= \lim_{j \rightarrow \infty} \lim_{k \rightarrow \infty} \left( \int_B \min\{j, |u_k - (u_k)_B|^q\} d\mu \right)^{1/q} \leq C \operatorname{diam}(B) \left( \int_{\lambda B} g^p d\mu \right)^{1/p}, \end{aligned}$$

Alternatively Fatou’s lemma can be used.

- p. 107, l. –2. Replace “complete” by “proper”.
- p. 131, l. 5. Replace  $u \geq \frac{1}{2}$  by  $u(x) \geq \frac{1}{2}$ .
- p. 145, l. 15. Replace  $\|g_u^p\|_{L^p(X)}$  by  $\|g_u\|_{L^p(X)}^p$ .
- p. 145, l. –8. Replace  $C(r^p + 1)$  by  $C(r^p + 1)\mu(2B)$ .
- p. 155, l. 19. Replace “Lemma 1.39” by “Corollary 1.39”.
- p. 159, l. –8. Insert “Assume that  $\operatorname{supp} \mu$  is locally compact.” before “If”.
- p. 169, l. 1. Replace 6.7 (xi) by 6.19 (x).
- p. 182, l. –7. Replace “open” by “bounded open”.
- p. 246, l. –12. Replace [46] by [45].
- p. 259, l. 5. Insert “Let  $h_j = \max\{f_j, \psi_j\}$ . As  $h_j - f_j = (\psi_j - f_j)_+ \in N_0^{1,p}(\Omega)$ , by Proposition 7.4, we have  $h_j \in \mathcal{K}_{\psi_j, f_j}$ .” before “Let”.

**p. 259, l. 9–10.** Replace by

$$\begin{aligned}\|w_j\|_{N^{1,p}(X)} &\leq C\|g_{w_j}\|_{L^p(\Omega)} \leq C(\|g_{u_j}\|_{L^p(\Omega)} + \|g_{f_j}\|_{L^p(\Omega)}) \\ &\leq C(\|g_{h_j}\|_{L^p(\Omega)} + \|g_{f_j}\|_{L^p(\Omega)}) \leq C(\|f_j\|_{N^{1,p}(\Omega)} + \|\psi_j\|_{N^{1,p}(\Omega)}) \leq C\end{aligned}$$

**p. 259, l. 12.** Replace by

$$\|u_j\|_{N^{1,p}(\Omega)} \leq \|w_j\|_{N^{1,p}(\Omega)} + \|f_j\|_{N^{1,p}(\Omega)} \leq C(\|f_j\|_{N^{1,p}(\Omega)} + \|\psi_j\|_{N^{1,p}(\Omega)}) \leq C.$$

**p. 278, l. 18** Replace “ $\sup_{\partial B'}$ ” by  $\sup_{\partial B'} u$ .

**p. 345, l. 6** Replace “ $1 < p \leq n < q$ ” by “ $1 < q \leq n < p$ ”.

**p. 345, l. 18–19** Replace  $\mathbf{R}^n$  by  $\mathbf{R}^2$  twice.

**p. 348, l. 9** Insert “ $l_\gamma \leq Ad(x, y)$  and” after “such that”.

**p. 371, [44]** Add “on metric spaces” after “obstacle problem”.

**p. 371, [45]** Add “on metric spaces” after “obstacle problem”.

**p. 372, [56]** Add “in metric spaces” after “functions”.