

ERRATA FOR “OBLIQUE DERIVATIVE PROBLEMS FOR ELLIPTIC EQUATIONS”

- page 5 In the proof of Lemma 1.2, we may assume without loss of generality that $x^1 > 0$ in Ω .
- page 7 line 4 Remove the space after the left parenthesis.
- page 148 line 10 At the beginning of this line, insert “has a solution $u \in C^2(Q) \cap C^1(\overline{Q} \setminus s) \cap C(\overline{Q})$ ”
- page 326 line-1 Delete M_1
- page 327 line 3 Delete M_1
- line -4 M_0 should read M_1 .
- line -4 Delete period.
- line -3 Insert at the the beginning of the line “on S_0 , the set on which $w_1 \geq M_1/2$.”
- line -3 “sufficiently small” should read “sufficiently large”.
- page 328 line 1 Delete “, the set on which $w_1 \geq M_1/2$ ”.
- page 345 The final inequality on line -5 does not follow from Lemma 9.4 because we haven’t yet shown that (9.27) holds. Instead, we need to consider two cases. First, if

$$\lim_{s \rightarrow \infty} sF(s) = \infty,$$

then there is a positive constant s_0 such that $\sup |\psi| \leq \frac{1}{2}sF(s)$ for all $s \geq s_0$. Since $\nu \cdot \gamma = \psi/vF(v)$, it follows that

$$b_p \cdot \gamma \geq \frac{3}{4}F(v)$$

for $v \geq s_0$. On the other hand, if

$$\lim_{s \rightarrow \infty} sF(s) < \infty$$

(which is the case if $F(s) = 1/s$ as in the capillary problem), then we must also assume that

$$\sup |\psi| < \lim_{s \rightarrow \infty} sF(s).$$

Setting

$$\varepsilon_0 = \frac{\sup |\psi|}{\lim_{s \rightarrow \infty} sF(s)}$$

and noting that $\varepsilon_0 < 1$, we see that there is a positive constant s_1 such that

$$\frac{\sup |\psi|}{vF(v)} \leq \frac{1}{2}(1 + \varepsilon_0)$$

if $v \geq s_1$, and the right hand side of this inequality is less than one. Hence in either case, there are positive constants c_0 and s_1 such that

$$b_p \cdot \gamma \geq c_0 F(v)$$

wherever $v \geq s_1$.

- page 346 The inequality in line 5 follows not from Lemma 9.4 but from our previous estimate of $\nu \cdot \gamma$.

line 8 $q > 1$ should read $q > 0$.

- page 352 line 2 $\frac{1}{4k_0}$ should read $\frac{M_T}{4k_0}$.

- page 356 (9.64c) is a consequence of the first inequality of (9.57) with ξ replaced by p , so it should be removed from the list of hypotheses of Theorem 9.12.
In equations (9.64d), (9.64e), and (9.64f), $(\Lambda\mathcal{E})$ should read $(\Lambda\mathcal{E})^{1/2}$.
- page 357 line -4 c^{rm} should read c^{im}
line -3 $\nu \cdot \gamma_k$ should read $\nu \cdot \gamma \gamma_k$.
- page 358 line -9 The second $=$ should read $-$.
line -6 (9.11) should read 9.11.
line -5 should read

$$0 \leq \frac{1}{2} a^{ij} D_{ij} w + B_6^i D_i w + C_1^* \tilde{w}_T + C_3^* M_T$$

- page 360 line -2 $O(1/|p|)$ should read $O(1)$.
line -1 $O(1/|p|)$ should read $O(1)$.
- page 361 line 11 should read

$$\eta(x) = f(\varphi(x, u(x))).$$

- line -8 $g^{rj} D_j v$ should read $-\frac{2}{v} g^{rj} D_j v$.
line -4 should read

$$g^{ij} D_{ij} w + \left(a^r - \frac{2}{v} g^{rj} D_j v \right) D_r w + (C\eta - g^{ij} D_{ij} \eta - a^j D_j \eta) v - \eta \mathcal{C}^2 = 0.$$

- line -1 should read

$$f'' \left[4g^{ij} \frac{x^i x^j}{R^4} - \frac{2Du \cdot x}{u_0 v^2 R^2} + \frac{|Du|^2}{4u_0^2 v^2} \right].$$

- page 362 line 5 should read

$$4g^{ij} \frac{x^i x^j}{R^4} - \frac{2Du \cdot x}{u_0 v^2 R^2} + \frac{|Du|^2}{4u_0^2 v^2} \geq \frac{|Du|^2}{8u_0^2 v^2}$$

- lines 6, -11, and -8 The number 8 should be replaced with the number 16.
- page 383 line 14 $(1 + c_0^2)^{1/2} v$ should read $(1 + c_0^2)^{1/2}$.
- page 385 line 12 $|\bar{g}(x, z, p, \rho) - \bar{g}(x, z, p, 0)|$ should read $|\bar{g}(x, z, p, \rho) - \bar{g}(x, z, p, 0)|$.
- page 387 line -14 $\xi \rho_p \cdot \xi$ should read $\xi_i \rho_p \cdot \xi$
line -6 The N s in the denominators should read $|N|$.
- page 390 lines 10, 15 and -11 Replace β_1 with $(1 + \beta_2)\beta_1$.
- page 405 line 8 insert before the colon “when $A = \partial F / \partial p$ for some scalar function F ”
line 11 after “in” insert “an”