

# Erratum

The monograph contains several inaccuracies, small mistakes and misprints, which are mostly easily fixable.

Some more serious errors have been identified over the years. The following may be mentioned.

1) Page 26, line 10: replace “Theorem 2.3” by “the isoperimetric inequality on  $\mathbb{S}^n$ ”

2) Page 34, Proof of Theorem 2.13, read: ... Clearly, if  $q = \theta q_0 + (1 - \theta)q_1$ ,  $q_0, q_1 \in \mathbb{R}$ ,

$$w_q(\theta x + (1 - \theta)y) \geq u_{q_0}(x)^\theta v_{q_1}(y)^{1-\theta}$$

for all  $x, y \in \mathbb{R}^{n-1}$ . Therefore, by the induction hypothesis,

$$\int_{\mathbb{R}^{n-1}} w_q dx \geq \left( \int_{\mathbb{R}^{n-1}} u_{q_0} dx \right)^\theta \left( \int_{\mathbb{R}^{n-1}} v_{q_1} dx \right)^{1-\theta}.$$

3) Page 35: the application of Proposition 2.14 to  $F : \mathbb{R}^n \rightarrow \mathbb{R}$  non-negative, convex and symmetric, requires  $F$  to be also homogeneous ( $F(rx) = rF(x)$ ,  $r > 0$ ,  $x \in \mathbb{R}^n$ ).

4) Page 48, Proof of Theorem 3.1, read: ... and  $f = -1/b$  on  $B$ ). Besides, in the inequalities

$$b \leq \frac{1 - a}{1 + \lambda_1 \varepsilon^2 a} \leq \frac{1}{1 + \lambda_1 \varepsilon^2 a},$$

the second one is irrelevant and should be deleted.

5) Page 50: there is a  $\lambda^2$  missing on the right-hand side of (3.4).

6) Page 51, Proof of Theorem 3.3: in the upper bound on  $\mathcal{Q}(e^{\lambda F/2}, e^{\lambda F/2})$ ,  $\frac{\lambda^2}{2}$  may be replaced by  $\frac{\lambda^2}{4}$ , which improves some of the subsequent numerical constants (in particular in the statement of Theorem 3.3 itself).

7) Pages 51-52, (3.5) and Corollary 3.4: the distance  $d$  introduced at the bottom of page 51 is not, in general, suitably related to the norm  $\|\cdot\|_\infty$  so that (3.5) is erroneous. As a consequence, Corollary 3.4 is also incorrect.

8) Page 61, after (3.18), read: ... and the ellipsoid, the image of the Euclidean unit ball of  $\mathbb{R}^k$  under the isomorphism  $e_i \rightarrow (1 - \varepsilon)(1 + \varepsilon)v_i$ , satisfy (3.17).

9) Page 121, Proposition 6.3:  $\nu$  should be  $\nu_i$  in the inequality

$$W_{\tilde{c}_i}(\mu_i, \nu) \leq H(\nu | \mu_i).$$

10) Page 133, (7.1) should be:

$$\sigma = \sup_{t \in T} (\mathbb{E}(G_t^2))^{1/2} < \infty.$$

11) Page 162, lines 9-11, read: ... Together with this result, Theorem 8.5 indicates that for every  $0 \leq r \leq \sqrt{n}$ ,

$$\mathbb{P}(|Z_{\mathcal{T}_n} - m_n| \geq r) \leq K \exp\left(-\frac{r^2}{Kn}\right)$$

where  $m_n$  is a median of  $Z_{\mathcal{T}_n}$ .