

LIST OF ERRATA (updated on 7/26/2013)

for “Mathematical Statistics: Asymptotic Minimax Theory” by A. Korostelev and O. Korosteleva, American Mathematical Society, Graduate Studies in Mathematics, Vol. 119, 2011

**Non-trivial errata are marked by an asterisk (\*).**

1. Page 26, first line in (3.9): Should be “ $\theta \in \Theta$ ” instead of “ $\theta \in \mathbb{R}$ ”.

2. Page 27, first line in (3.13): Should be “ $\theta \in \Theta$ ” instead of “ $\theta \in \mathbb{R}$ ”.

3\*. Page 37, formula (3.39): Should be “ $\mathbb{E}_\theta[|\mathfrak{z}'_n(t)|]$ ” instead of “ $\mathbb{E}_\theta[\mathfrak{z}'_n(t)]$ ”.

4\*. Page 38, line 9: Should add the sentence “The lower bound in (3.39) is shown similarly by considering  $-\mathfrak{z}'_n(t)$ .”

5\*. Page 103, the paragraph preceding formula (8.5): The words “for any estimator  $\hat{f}_n$ ,” should be removed.

6\*. Page 103, formula (8.5): Should be

$$r_* \leq \liminf_{n \rightarrow \infty} \inf_{\hat{f}_n} r_n(\hat{f}_n, w, \psi_n) \leq \limsup_{n \rightarrow \infty} \inf_{\hat{f}_n} r_n(\hat{f}_n, w, \psi_n) \leq r^*.$$

7. Page 146, formula (10.31): Should be “ $(\mathbf{y}, \varphi_k(\cdot))_{2,n}$ ” instead of “ $(y_i, \varphi_k(\cdot))_{2,n}$ ”.

8. Page 175, line 5 from the bottom: Should be “ $\varepsilon_i/\sigma$ ” instead of “ $\varepsilon_i$ ”.

9\*. Page 176, Proof of Lemma 12.8: The first five lines of the proof should be omitted. The proof should start with (12.19). The second line from the bottom should be

$$\geq \sum_{m=1}^M \mathbb{E}_m \left[ \frac{d\mathbb{P}_0}{d\mathbb{P}_m} \mathbb{I}(\overline{\mathcal{D}}_m \mathcal{A}_m) \right] \geq \frac{1}{M^\alpha} \sum_{m=1}^M \mathbb{P}_m(\overline{\mathcal{D}}_m \mathcal{A}_m).$$

The formulas at the top of page 177 should be

$$\begin{aligned} \max_{0 \leq m \leq M} \mathbb{P}_m(\mathcal{D}_m) &\geq \frac{1}{2} \left[ \mathbb{P}_0(\mathcal{D}_0) + \frac{1}{M} \sum_{m=1}^M \mathbb{P}_m(\mathcal{D}_m) \right] \\ &\geq \frac{1}{2} \left[ \frac{1}{M^\alpha} \sum_{m=1}^M \mathbb{P}_m(\overline{\mathcal{D}}_m \mathcal{A}_m) + \frac{1}{M} \sum_{m=1}^M \mathbb{P}_m(\mathcal{D}_m) \right] \\ &\geq \frac{1}{2M} \sum_{m=1}^M [\mathbb{P}_m(\overline{\mathcal{D}}_m \mathcal{A}_m) + \mathbb{P}_m(\mathcal{D}_m)] \geq \frac{1}{2M} \sum_{m=1}^M \mathbb{P}_m(\mathcal{A}_m) = 1/4. \end{aligned}$$

10\*. Page 178, Proof of Lemma 12.11: The third line of the proof should be

$$\geq \sum_{m \in \mathcal{M}} \mathbb{E}_m \left[ \frac{d\mathbb{P}_0}{d\mathbb{P}_m} \mathbb{I}(\overline{\mathcal{D}}_m \mathcal{A}_m) \right] \geq \frac{1}{M^\alpha} \sum_{m \in \mathcal{M}} \mathbb{P}_m(\overline{\mathcal{D}}_m \mathcal{A}_m)$$

The last line of the proof should be

$$\geq \frac{1}{2M} \sum_{m \in \mathcal{M}} [\mathbb{P}_m(\overline{\mathcal{D}}_m \mathcal{A}_m) + \mathbb{P}_m(\mathcal{D}_m)] \geq \frac{1}{2M} \sum_{m \in \mathcal{M}} \mathbb{P}_m(\mathcal{A}_m) = \frac{|\mathcal{M}|}{4M}.$$

11. Page 191, Exercise 13.89: Should be “ $\Theta(\beta, L, L_1)$ ” instead of “ $\Theta(\beta, L, \mathbb{L}_1)$ ”.