

Errata for “Concentration inequalities for separately convex function”

- page 2906, line -3. The displayed formula (1.3) should be $Z_k := \mathbb{E}_k[Z]$.
- page 2907, last line. The displayed formula “ $F(X_1, \dots, X_n) \leq_{\mathcal{H}_+^1} \sum_{k=1}^n \varepsilon_k \|X_k\|$ ” should be “ $F(X_1, \dots, X_n) - \mathbb{E}[F(X_1, \dots, X_n)] \leq_{\mathcal{H}_+^1} 2 \sum_{k=1}^n \varepsilon_k \|X_k\|$ ”.
- page 2909, lines 2-3 in Theorem 2.3. Replace “there exist nonnegative, \mathbb{L}^r -integrable and $\sigma(X_k)$ -measurable random variables T_k and W_k ” by “there exist nonnegative, \mathbb{L}^r -integrable random variables T_k and W_k such that $\mathbb{E}_k[T_k]$ and $\mathbb{E}_k[W_k]$ are independent of \mathcal{F}_{k-1} ”.
- page 2909, line 9 in Theorem 2.3. In the right-hand side of (2.6), $(p - 1)$ should be $(r - 1)$.
- page 2913, line 6 in Example 5.2. In the displayed formula (5.3), $\|X\|^r$ should be $\mathbb{E}[\|X\|^r]$.
- page 2913, line 8 in Example 5.2. The displayed formula $Z = \sum_{f \in \mathcal{F}} |\sum_{k=1}^n f(X_k)|$ should be $Z = \sum_{f \in \mathcal{F}} |\sum_{k=1}^n a_k f(X_k)|$.
- page 2913, line 9 in Example 5.2. Replace “class of measurable real-valued functions” by “class of measurable real-valued functions such that $\mathbb{E}[f(X)] = 0$ for all $f \in \mathcal{F}$ ”.
- page 2913, line 11 in Example 5.2. Replace “envelop” by “envelope”.
- page 2914, line 1 in Section 5.2. Add “Set also $a = (a_1, \dots, a_n)$ ”.
- pages 2915-2918. The weight function q should defined on $]0, 1[$ instead of $[0, 1]$.
- page 2916 in Proposition 6.2. Add “where $\varepsilon_1, \dots, \varepsilon_n$ are independent Rademacher random variables, U_1, \dots, U_n are independent random variables distributed uniformly on $[0, 1]$ and these two families are independent” after the displayed formula.
- page 2916 in Remark 6.4. In the displayed formula, the suprema should be taken over $t \in \mathbb{R}$ such that $0 < F_X(t) < 1$.
- pages 2919-2921, in Section 7.1.3. To avoid any confusion, in all section, replace the positive deterministic reals $\sigma_1, \dots, \sigma_n$ by a_1, \dots, a_n . And add $a = (a_1, \dots, a_n)$.

- page 2921, in Section 7.2. Add to the line 1 “In the sequel, we assume that the underlying probability space $(\Omega, \mathcal{F}, \mathbb{P})$ is rich enough to contain a random variable with uniform distribution over $[0, 1]$, independent of all other considered random variables.”
- page 2922, line 3 in the proof of Lemma 7.9. The displayed formula should be $\int_0^\alpha Q_{|X|}^r(u)du = \int_0^1 Q_{|X|}^r(u)Q_{\theta_\alpha}(u)du = \sup_\theta \mathbb{E}[|X|^r\theta]$.
- page 2923, lines 1-2 in Example 7.13 $\mathcal{F} = \{\mathbf{1}_S - \mathbb{P}(S) : S \in \mathcal{S}\}$ should be “ $\mathcal{F} = \{\mathbf{1}_S - P(S) : S \in \mathcal{S}\}$ where P is the common distribution of X_1, \dots, X_n ”.
- page 2925, line 1. “where $\tilde{X}_k := (f(X_k))_{f \in \mathcal{F}}$ ” should be “where $\tilde{X}_k := (f(X_k)g(X_k))_{(f,g) \in \Gamma}$ ”