

R. Schneider, W. Weil, *Stochastic and Integral Geometry*. Springer, Berlin-Heidelberg, 2008.

ERRATA

p. VI, l. 21: Replace ‘taylored’ by ‘tailored’.

p. 1, l. -3: Replace ‘similarly’ by ‘invariant’.

p. 79, l. -2: Replace $\mathcal{B} \otimes \Omega$ by $\mathcal{B} \otimes \mathbf{A}$.

p. 102, Theorem 4.1.2: The first sentence after formula (4.4) has to be replaced by the following one:

Sufficient for (4.4) is the \mathbb{Q} -integrability of the d th power of the circumradius, and in the case of a process of convex particles, (4.4) is equivalent to the \mathbb{Q} -integrability of the intrinsic volumes V_1, \dots, V_d .

p. 103, line 12: “The remaining equivalences” has to be replaced by “The remaining assertions on the validity of (4.4)”

p. 139, l. 14: Delete the factor $\frac{1}{2}$.

p. 156, l. 18: Replace (4.34) by (4.31).

p. 172, l. 1: Replace

$$c_j^k = \frac{\Gamma(\frac{k+1}{2})}{\Gamma(\frac{j+1}{2})} \quad \text{by} \quad c_j^k = (2\sqrt{\pi})^{k-j} \frac{\Gamma(\frac{k+1}{2})}{\Gamma(\frac{j+1}{2})}.$$

p. 193, l. 16: Insert the factor $\frac{1}{\sigma_{d-1-j}(L \cap S^{d-1})}$ on the left side.

p. 197, formula (5.26): Replace gB by $g.B$

p. 242, formula (6.34): Replace $\gamma(F, u^\perp)$ by $\gamma(F, u^\perp; K, u^\perp)$.

p. 251, l. -9: Replace $d_s(K, x) \leq \epsilon$ by $0 < d_s(K, x) \leq \epsilon$.

p. 253, l. -3: Replace $K \in \mathcal{K}_s$ by $K \in \mathcal{K}_s, K \neq S^{d-1}$.

p. 258, l. 9: Replace ‘a continuous extension’ by ‘an additive extension’.

p. 262, l. -1: In the numerator, replace ω_d by ω_{d-1} .

p. 358, l. 6: Replace $x \in L_q^\perp$ by $x \in \vartheta L_q^\perp$

p. 364, l. 5: Replace

$$2^{k-1} \frac{\kappa_d \kappa_{d+k-1}}{\kappa_k} \quad \text{by} \quad 2^{k-1} d \frac{\kappa_d \kappa_{d+k-1}}{\kappa_k}.$$

p. 373, l. 5: Replace (8.57) by (8.56).

p. 373, formula (8.63): $\frac{\kappa_d}{\kappa_q}$ must be outside the round brackets.

p. 388, l. -1: Replace $c_j^{m_i}$ by $c_d^{m_i}$ and insert the factor c_j^d before the sum over s .

p. 440, l. 7: Replace line 7 by “of the parts of the arcs visible in direction u and projected to the line orthogonal to u . A similar estimator, involving circular arcs, is studied in the book by Hall [317].”

p. 441, l. 16 and l. 23: Replace $\overline{V}_{2,2,2}^{(0)}$ by $\frac{1}{6}\overline{V}_{2,2,2}^{(0)}$.

p. 441, l. -2: Replace $\overline{h}(X, u)$ by $\overline{h}(X, -u)$.

p. 469, line 6 of Note 7: Insert ‘a’ before ‘stationary’.

p. 469, line 9 of Note 7: Replace ‘with the cells of \mathcal{Y}_i ’ by ‘with the cells of the i th mosaic of \mathcal{Y}_1 ’.

p. 472, l. 5: Replace $\text{conv } X$ by $\text{conv } \tilde{X}$.

p. 478: The proof of

$$\bigcup_{e \in \mathcal{F}_0(m)} D(e, A) = \mathbb{R}^d \quad (1)$$

is not correct; the last paragraph of the proof should be replaced by the following text.

We identify \mathbb{R}^d with the subspace of \mathbb{R}^{d+1} spanned by the vectors e_1, \dots, e_d of an orthonormal basis (e_1, \dots, e_{d+1}) of \mathbb{R}^{d+1} , define $\ell(y) := y + \|y\|^2 e_{d+1}$ for $y \in \mathbb{R}^d$ and $P := \text{conv } \ell(A)$. Let \mathcal{F}_P denote the set of facets of the polyhedral set P with an outer normal vector n satisfying $\langle n, e_{d+1} \rangle < 0$. Then $\bigcup_{F \in \mathcal{F}_P} \pi F = \mathbb{R}^d$, where $\pi : \mathbb{R}^{d+1} \rightarrow \mathbb{R}^d$ denotes the orthogonal projection. If this were false, then P and some line parallel to e_{d+1} could be separated by a hyperplane, contradicting the assumption that $\text{conv } A = \mathbb{R}^d$. Thus, (1) follows if we have shown that $\pi F \in \mathbf{d}$ for $F \in \mathcal{F}_P$.

For the proof, let $F \in \mathcal{F}_P$. The hyperplane $H := \text{aff } F$ is the image of \mathbb{R}^d under an affine map $\alpha : \mathbb{R}^d \rightarrow \mathbb{R}^{d+1}$, which can be written in the form $\alpha(y) = y + (\langle 2z, y \rangle + b)e_{d+1}$ with a vector $z \in \mathbb{R}^d$ and a real number b . For $x \in \mathbb{R}^d$ we have

$$\alpha(z + x) = \ell(z + x) + (b + \|z\|^2 - \|x\|^2)e_{d+1}.$$

Since H intersects the paraboloid $\ell(\mathbb{R}^d)$, we must have $b + \|z\|^2 > 0$ and hence can write

$$\alpha(z + x) = \ell(z + x) + (r^2 - \|x\|^2)e_{d+1}$$

with $r > 0$. Since F is a facet of P , this shows that the ball $\{z + x : x \in \mathbb{R}^d, \|x\| \leq r\}$ in \mathbb{R}^d contains no points of A except, in its boundary, the projections of the vertices of F . Consequently, $\pi F = D(z, A)$.

p. 497, l. -13, -12: Replace the clause in brackets by: (that is, not all passing through one point, and such that any d of their normal vectors are linearly independent).

p. 504, l. 5: Before the sum sign, insert \mathbb{E} .

p. 508, l. -10: Replace $0 \in \mathcal{K}$ by $0 \in K$.

p. 510, l. -11: Replace ‘ k -dimensional ball $B^k(x_0, \dots, x_{d-k})$ ’ by ‘ $(d - k)$ -dimensional ball $B^{d-k}(x_0, \dots, x_{d-k})$ ’.

p. 532, l. -10: Replace ‘Section 9.1’ by ‘Section 9.5’.

p. 554, l. 8: Replace $d_j^{(0)}(z)$ by $d_0^{(k)}(z)$.

p. 556, l. 3: The fraction should read

$$\frac{1}{V_d(rB^d)}.$$

- p. 556, l. 6: Replace $d^{(j)}$ by $d_j^{(j)}$.
- p. 626, formula (14.62): Under the limit, replace $u \downarrow \lambda$ by $\mu \downarrow \lambda$.
- p. 629, l. -4: Replace $m\mu(K+S) = \mu(Z) = \mu(\bar{Z}) = 0$ by $m\psi(K+S) = \psi(Z) = \psi(\bar{Z}) = 0$.
- p. 639, reference 40: replace (1979) by (1975).
- p. 639, reference 57: Replace (2005) by (2004).
- p. 642, reference 122: Replace (200) by (2000).
- p. 645, reference 179: Replace (1971) by (1967).
- p. 657, l. 3: Replace ‘Ensembles aléatoires’ by ‘Ensembles fermés aléatoires’.
- p. 659, reference 518: Replace 902 by 901.
- p. 664, reference 631: Replace “Stochastical” by “Stochastic”.
- p. 667, reference 718: Delete the full stop after “Wahrscheinlichkeitstheorie”.
- p. 673, l. 4: Replace ‘zufälliger Polygone’ by ‘zufälliger konvexer Polygone’.