R. Schneider, *Convex Bodies – The Brunn–Minkowsk Theory.* Second expanded edition. Encyclopedia of Mathematics and Its Applications **151**, Cambridge University Press, Cambridge, xxii+736 pp, 2014.

ERRATA (last update: October 1, 2023)

p. 57, line 14: Replace 'max' by 'sup'.

p. 82, Theorem 2.2.11(b): As Daniel Hug pointed out, it must still be proved that $N(K,x)+N(L,x)$ is closed. To prove this, we may assume that $x \in \operatorname{bd} K \cap \operatorname{bd} L$ and $\operatorname{aff}(K \cup L) = \mathbb{R}^n$. Let $a_i \in N(K,x)$, $b_i \in N(L,x)$ such that $a_i + b_i \to c$ as $i \to \infty$. If (a_i) is bounded, then also (b_i) is bounded, and both sequences have convergent subsequences, which gives $c \in N(K,x)+N(L,x)$. Suppose (a_i), (b_i) are both unbounded. Then we can assume that $a_i, b_i \neq o$ and hence $a_i = \lambda_i u_i$, $b_i = \mu_i v_i$ with unit vectors u_i, v_i and $\lambda_i, \mu_i \to \infty$. A subsequence of (u_i) converges to some $u \in N(K,x)$, and a subsequence of (v_i) converges to some $v \in N(L,x)$. The convergence $\lambda_i u_i + \mu_i v_i \to c$ implies that $u = -v$. But then K and L are separated by the hyperplane through x orthogonal to u, v, which contradicts Theorem 1.3.8.

p. 136, lines 10–11: The assertion saying that $P + \varepsilon B^n \in \mathcal{K}^n_r \setminus \mathcal{A}_k$, is not correct. Instead, the proof of Theorem 2.7.2 should use the original argument of Zamfirescu [2038].

p. 156, Proof of Theorem 3.2.1: Without loss of generality, assume $\dim K = n$.

p. 219, line after (4.33): Replace "Theorem 3.2.3" by "Theorem 3.2.22".

p. 286, equation (5.33): The factor $\frac{1}{n}$ is missing on the right side.

p. 294, equation (5.43): The factor $\frac{1}{n}$ is missing on the right side.

p. 303, line -8: Replace E by $E^\perp$.

p. 317, line 5: Replace $\Psi_{r-1}(e_{i_1}, \dots, \check{e}_{i_k}, \dots, e_{i_r})$ by $\Psi_{r-1}(K)(e_{i_1}, \dots, \check{e}_{i_k}, \dots, e_{i_r})$.

p. 318: In lines 8, 9, 10, ϕ_j must be replaced by Λ_j.

p. 319, line -13: Replace 'Note 7' by 'Note 9'.

p. 344, line -2: Replace φ by $\overline{\varphi}$.

p. 345, line -6: Replace φ by $\overline{\varphi}$.

p. 346, line 4: Replace 'Theorem 6.3.4' by 'Theorem 6.3.1'.

p. 351, line 13: Replace $\mathbb{R}^n$ by $\mathbb{R}$.

p. 357: In lines 4, -9, -3,

$$\int_{\mathbb{S}^{n-1}} \quad \text{must be replaced by} \quad \int_{\mathbb{S}^{n-1}} \cdots \int_{\mathbb{S}^{n-1}} \ (m \text{ integrals}).$$

p. 401, lines -10, -11: Replace 'Minkowski's inequality (7.18)' by 'the Aleksandrov–Fenchel inequality (7.54)'.

p. 459, line -11: Replace 'Theorem 9.1.4' by 'Theorem 9.2.1'.

p. 501, line -2: Replace K by K_j.

p. 539, after Theorem 10.3.5: The reference to Pfiefer [1532] is misleading, since Pfiefer considers different ranges of the parameters.

p. 569, l. 11: Reference [1511] must be replaced by the following one, which is missing in the bibliography:

Paouris, G., Pivovarov, P., A probabilistic take on isoperimetric-type inequalities. *Adv. Math.* **230** (2012), 1402–1422.

p. 575, line -9: The assumption $\phi(0) = 0$ must be added.

p. 578, first line of Note 7: Replace [1698] by [1697].

p. 646, reference [415]: Replace (2911) by (2011).

p. 675, reference [1119]: Insert (1981).

p. 680, reference [1260]: Replace (1932) by (1935).

p. 698, reference [1699]: Replace (19983) by (1983).

p. 710, reference [1992]: Replace (2001) by (1901).

Updates of references

[50] Alesker, S., On extendability by continuity of valuations on convex polytopes. *Adv. Math.* **255** (2014), 352–380.

[68] Ambrus, G., Böröczky, K. J., Stability results for the volume of random simplices. *Amer. J. Math.* **136** (2014), 833–857.

[152] Bárány, I., Schneider, R., Universal points of convex bodies and bisectors in Minkowski spaces. *Adv. Geom.* **14** (2014), 427–445.

[162] Barthe, F., Böröczky, K. J., Fradelizi, M., Stability of the functional forms of the Blaschke–Santaló inequality. *Monatsh. Math.* **173** (2014), 135–159.

[212] Bernig, A., Fu, J. H. G., Solanes, G., Integral geometry of complex space forms. *Geom. Funct. Anal.* **24** (2014), 403–492.

[224] Bianchi, G., Burchard, A., Gronchi, P., Volčič, A., Convergence in shape of Steiner symmetrizations. *Indiana Univ. Math. J.* **61** (2012), 1695–1710.

[260] Bobkov, S. G., Colesanti, A., Fragalà, I., Quermassintegrals of quasi-concave functions and generalized Prékopa–Leindler inequalities. *Manuscripta Math.* **143** (2014), 131–169.

[290] Böröczky, K. J., Stronger versions of the Orlicz–Petty projection inequality. *J. Differential Geom.* **95** (2013), 215–247.

[296] Böröczky, K. J., Lutwak, E., Yang, D., Zhang, G., Affine images of isotropic measures. *J. Differential Geom.* **99** (2015), 407–442.

[452] Coupier, D., Davydov, Yu., Random symmetrizations of convex bodies. *Adv. in Appl. Probab.* **46** (2014), 603–621.

[679] Gardner, R. J., Hug, D., Weil, W., Operations between sets in geometry. *J. Eur. Math. Soc.* **15** (2013), 2297–2352.

[680] Gardner, R. J., Hug, D., Weil, W., The Orlicz–Brunn–Minkowski theory: a general framework, additions, and inequalities. *J. Differential Geom.* **97** (2014), 427–476.

[681] Gardner, R., Parapatits, L., Schuster, F. E., A characterization of Blaschke addition. *Adv. Math.* **254** (2014), 396–418.

[709] Giannopoulos, A., Paouris, G., Vritsiou, B.–H., The isotropic position and the reverse Santaló inequality. *Israel J. Math.* **203** (2014), 1–22.

[754] Goodey, P., Weil, W., Sums of sections, surface area measures, and the general Minkowski problem. *J. Differential Geom.* **97** (2014), 477–514.

[762] Gordon, Y., Meyer, M., On the minima of the functional Mahler product. *Houston J.Math.* (2014), 385–393.

[879] Haberl, C., Parapatits, L., Valuations and surface area measures. *J. reine angew. Math.* 2014, no. 687, 225–245.

[880] Haberl, C., Parapatits, L., The centro-affine Hadwiger theorem. *J. Amer. Math. Soc.* **27** (2014), 685–705.

[969] Hernández Cifre, M. A., Saorín, E., Differentiability of quermassintegrals: a classification of convex bodies. *Trans. Amer. Math. Soc.* **366** (2014), 591–609.

[979] Hinderer, W., Hug, D., Weil, W., Extensions of translation invariant valuations on polytopes. *Mathematika* **61** (2015), 236–258.

[1013] Hug, D., Rataj, J., Weil, W., A product integral representation of mixed volumes of two convex bodies. *Adv. Geom.* **13** (2013), 633–662.

[1033] Jenkinson, J., Werner, E. M., Relative entropies for convex bodies. *Trans. Amer. Math. Soc.* **366** (2014), 2889–2906.

[1143] Kone, H., Valuations on Orlicz spaces and L^{ϕ}-stars. *Adv. Appl. Math.* **52** (2014), 82–98.

[1316] Maggi, F., Ponsiglione, M., Pratelli, A., Quantitative stability in the isodiametric inequality via the isoperimetric inequality. *Trans. Amer. Math. Soc.* **366** (2014), 1141–1160.

[1329] Markessinis, E., Valettas, P., Distances between classical positions of centrally symmetric convex bodies. *Houston J. Math.* **41** (2015), 187–211.

[1513] Paouris, G., Werner, E. M., On the approximation of a polytope by its dual L_p-centroid bodies. *Indiana Univ. Math. J.* **62** (2013), 235–248.

[1517] Parapatits, L., $\mathrm{SL}(n)$-contravariant L_p-Minkowski valuations. *Trans. Amer. Math. Soc.* **366** (2014), 1195–1211.

[1519] Parapatits, L., Wannerer, T., On the inverse Klain map. *Duke Math. J.* **162** (2013), 1895–1922.

[1636] Saroglou, C., Minimal surface area position of a convex body is not always an M-position. *Israel J. Math.* **195** (2013), 631–645.

[1731] Schneider, R., Local tensor valuations on convex polytopes. *Monatsh. Math.* **171** (2013), 459–479.

[1732] Schneider, R., Affine surface area and convex bodies of elliptic type. *Period. Math. Hungar.* **69** (2014), 120–125.

[1796] Soberón, P., Equal coefficients and tolerance in colored Tverberg partitions. *Combinatorica* **35** (2015), 235–252.

[1901] Vritsiou, B.–H., Further unifying two approaches to the hyperplane conjecture. *Int. Math. Res. Not. IMRN* 2014, no. 6, 1493–1514.

[1908] Wang, T., Semi-valuations on $BV(\mathbb{R}^n)$. *Indiana Univ. Math. J.* **63** (2014), 1447–1465.

[1924] Wannerer, T., The module of unitarily invariant area measures. *J. Differential Geom.* **96** (2014), 141–182.