

ROLF SCHNEIDER

## Publications

### BOOKS

R. Schneider, *Convex Bodies: The Brunn-Minkowski Theory*. Second expanded edition. Encyclopedia of Mathematics and Its Applications 151, xvii+736 pp, Cambridge University Press, Cambridge, 2014.

R. Schneider, W. Weil, *Stochastic and Integral Geometry*. xii+694 pp, Springer, Berlin-Heidelberg, 2008.

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*Polytopes: Abstract, Convex and Computational* (Scarborough 1993; T. Bisztriczky, P. McMullen, R. Schneider, A. Ivić Weiss, eds.), *NATO ASI Series C*, vol. 440, Kluwer, Dordrecht, 1994.

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J. Mecke, R. Schneider, D. Stoyan, W. Weil, *Stochastische Geometrie*. DMV-Seminar 16, 216 pp, Birkhäuser, Basel, 1990.

### ARTICLES

**205.** Polyhedral Gauss–Bonnet theorems and valuations. *Beiträge Algebra Geom.* (2017), DOI 10.1007/s13366-017-0364-4.

**204.** A Brunn–Minkowski theory for coconvex sets of finite volume. (submitted).

**203.** Intersection probabilities and kinematic formulas for polyhedral cones. *Acta Math. Hungar.* (accepted), arXiv:1706.03571 (2017).

**202.** The typical irregularity of virtual convex bodies. *J. Convex Anal.* (accepted), arXiv:1610.07911 (2016).

- 201.** (with M. Reitzner) On the cells in a stationary Poisson hyperplane mosaic. *Adv. Geom.* (accepted), arXiv:1609.04230 (2016).
- 200.** Combinatorial identities for polyhedral cones. *Algebra i Analiz* **29** (2017), 279–295.
- 199.** The middle hedgehog of a planar convex body. *Beitr. Algebra Geom.* (accepted), arXiv:1607.03014 (2016).
- 198.** (with D. Hug) Rotation covariant local tensor valuations on convex bodies. *Commun. Contemp. Math.* **19**, no. 5, 1650061 (2017), 31 pp.
- 197.** (with D. Hug)  $SO(n)$ -covariant local tensor valuations on polytopes. *Michigan Math. J.* **66** (2017), 637–659.
- 196.** (with J. P. Moreno) Multiplication of convex sets in  $C(K)$  spaces. *Studia Math.* **232** (2016), 173–187.
- 195.** Discrete aspects of stochastic geometry. (Handbook article, 3rd updated version) (to appear).
- 194.** (with D. Hug) Random conical tessellations. *Discrete Comput. Geom.* **56** (2016), 395–426.
- 193.** (with D. Hug) Tensor valuations and their local versions. In: *Tensor Valuations and Their Applications in Stochastic Geometry and Imaging* (E.B. Vedel Jensen, M. Kiderlen, eds), pp. 27–65, Lecture Notes in Math., vol. **2177**, Springer, 2017.
- 192.** Valuations on convex bodies—the classical basic facts. In: *Tensor Valuations and Their Applications in Stochastic Geometry and Imaging* (E.B. Vedel Jensen, M. Kiderlen, eds), pp. 1–25, Lecture Notes in Math., vol. **2177**, Springer, 2017.
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- 188.** (with I. Bárány) Typical curvature behaviour of bodies of constant width. *Adv. Math.* **272** (2015), 308–329.
- 187.** (with I. Bárány and D. Hug) Affine diameters of convex bodies. *Proc. Amer. Math. Soc.* **144**, no. 2 (2016), 797–812.
- 186.** A formula for mixed volumes. In *Geometric Aspects of Functional Analysis* (Israel Seminar 2011–2013), pp. 423–426, Lecture Notes Math. **2116**, Springer, 2014.
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- 183.** (with D. Hug) Local tensor valuations. *Geom. Funct. Anal.* 24 (2014), 1516–1564.
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- 169.** Stability for some extremal properties of the simplex. *J. Geom.* 96 (2009), 135 – 148.
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- 157.** (with D. Hug and R. Schuster) Integral geometry of tensor valuations. *Adv. in Appl. Math.* 41 (2008), 482 – 509.
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- 155.** (with K. J. Böröczky) Stable determination of convex bodies from sections. *Studia Sci. Math. Hungar.* 46 (2009), 367 – 376.
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