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Titolo	Stochastic Geometry, Spatial Statistics and Random Fields : Asymptotic Methods / / edited by Evgeny Spodarev
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Disciplina	519.2
Soggetti	Convex geometry Discrete geometry Probabilities Statistics Convex and Discrete Geometry Probability Theory Statistical Theory and Methods
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Livello bibliografico	Monografia
Note generali	Includes contributions presented at the Summer Academy on Stochastic Geometry, Spatial Statistics and Random Fields, held at the Sollerhaus, Hirschegg, Austria, September 13-26, 2009, under the auspices of the Institute of Stochastics, University of Ulm.
Nota di bibliografia	Includes bibliographical references (pages 421-440) and index.
Nota di contenuto	1 Foundations of stochastic geometry and theory of random sets -- 2 Introduction into integral geometry and stereology -- 3 Spatial point patterns – models and statistics -- 4 Asymptotic methods in statistics of random point processes -- 5 Random tessellations and Cox processes -- 6 Asymptotic methods for random tessellations -- 7 Random polytopes -- 8 Limit theorems in discrete stochastic geometry -- 9 Introduction to random fields -- 10 Central limit theorems for weakly dependent random fields -- 11 Strong limit theorems for increments of random fields -- 12 Geometry of large random trees: SPDE approximation.
Sommario/riassunto	This volume provides a modern introduction to stochastic geometry, random fields and spatial statistics at a (post)graduate level. It is

focused on asymptotic methods in geometric probability including weak and strong limit theorems for random spatial structures (point processes, sets, graphs, fields) with applications to statistics. Written as a contributed volume of lecture notes, it will be useful not only for students but also for lecturers and researchers interested in geometric probability and related subjects.