

1. Record Nr.	UNINA9910338253203321
Titolo	Stochastic Geometry : Modern Research Frontiers // edited by David Coupier
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-13547-0
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XIII, 232 p. 71 illus., 27 illus. in color.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2237
Disciplina	519.2 519.22
Soggetti	Probabilities Statistics Optical data processing Mathematical physics Probability Theory and Stochastic Processes Statistical Theory and Methods Computer Imaging, Vision, Pattern Recognition and Graphics Mathematical Applications in the Physical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	This volume offers a unique and accessible overview of the most active fields in Stochastic Geometry, up to the frontiers of recent research. Since 2014, the yearly meeting of the French research structure GDR GeoSto has been preceded by two introductory courses. This book contains five of these introductory lectures. The first chapter is a historically motivated introduction to Stochastic Geometry which relates four classical problems (the Buffon needle problem, the Bertrand paradox, the Sylvester four-point problem and the bicycle wheel problem) to current topics. The remaining chapters give an application motivated introduction to contemporary Stochastic Geometry, each one devoted to a particular branch of the subject: understanding spatial point patterns through intensity and conditional intensities; stochastic

methods for image analysis; random fields and scale invariance; and the theory of Gibbs point processes. Exposing readers to a rich theory, this book will encourage further exploration of the subject and its wide applications. .
