

1. Record Nr.	UNINA9910452958303321
Autore	Haenggi Martin
Titolo	Stochastic geometry for wireless networks // Martin Haenggi, University of Notre Dame, Indiana [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2013
ISBN	1-316-08953-3 1-139-79385-3 1-139-77948-6 1-139-78346-7 1-139-78247-9 1-139-77644-4 1-139-04381-1 1-283-71462-0 1-139-77796-3
Descrizione fisica	1 online resource (xv, 284 pages) : digital, PDF file(s)
Disciplina	621.39/80151922
Soggetti	Wireless communication systems - Mathematics Stochastic models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: Part I. Point Process Theory: 1. Introduction; 2. Description of point processes; 3. Point process models; 4. Sums and products over point processes; 5. Interference and outage in wireless networks; 6. Moment measures of point processes; 7. Marked point processes; 8. Conditioning and Palm theory; Part II. Percolation, Connectivity and Coverage: 9. Introduction; 10. Bond and site percolation; 11. Random geometric graphs and continuum percolation; 12. Connectivity; 13. Coverage; Appendix: introduction to R.
Sommario/riassunto	Covering point process theory, random geometric graphs and coverage processes, this rigorous introduction to stochastic geometry will enable you to obtain powerful, general estimates and bounds of wireless network performance and make good design choices for future wireless

architectures and protocols that efficiently manage interference effects. Practical engineering applications are integrated with mathematical theory, with an understanding of probability the only prerequisite. At the same time, stochastic geometry is connected to percolation theory and the theory of random geometric graphs and accompanied by a brief introduction to the R statistical computing language. Combining theory and hands-on analytical techniques with practical examples and exercises, this is a comprehensive guide to the spatial stochastic models essential for modelling and analysis of wireless network performance.
