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Note generali	Based on lectures given at the C.I.M.E. Summer School, held in Martina Franca, Italy, September 13-18, 2004.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Spatial Point Processes and their Applications -- Random Polytopes, Convex Bodies, and Approximation -- Integral Geometric Tools for Stochastic Geometry -- Random Sets (in Particular Boolean Models) -- Random Mosaics -- On the Evolution Equations of Mean Geometric Densities for a Class of Space and Time Inhomogeneous Stochastic Birth-and-growth Processes.
Sommario/riassunto	Stochastic Geometry is the mathematical discipline which studies mathematical models for random geometric structures, as they appear frequently in almost all natural sciences or technical fields. Although its roots can be traced back to the 18th century (the Buffon needle problem), the modern theory of random sets was founded by D. Kendall and G. Matheron in the early 1970's. Its rapid development was influenced by applications in Spatial Statistics and by its close connections to Integral Geometry. The volume "Stochastic Geometry" contains the lectures given at the CIME summer school in Martina Franca, Italy, September 13-18, 2004.

Franca in September 1974. The four main lecturers covered the areas of Spatial Statistics, Random Points, Integral Geometry and Random Sets, they are complemented by two additional contributions on Random Mosaics and Crystallization Processes. The book presents an up-to-date description of important parts of Stochastic Geometry.
