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Nota di contenuto	Deformed Field Theory: Physical Aspects -- Differential Calculus and Gauge Transformations on a Deformed Space -- Deformed Gauge Theories -- Einstein Gravity on Deformed Spaces -- Deformed Gauge Theory: Twist Versus Seiberg#x2013;Witten Approach -- Another Example of Noncommutative Spaces: #x03BA;-Deformed Space -- Noncommutative Geometries: Foundations and Applications -- Noncommutative Spaces -- Quantum Groups, Quantum Lie Algebras, and Twists -- Noncommutative Symmetries and Gravity -- Twist Deformations of Quantum Integrable Spin Chains -- The Noncommutative Geometry of Julius Wess.
Sommario/riassunto	There are many approaches to noncommutative geometry and to its use in physics. This volume addresses the subject by combining the deformation quantization approach, based on the notion of star-product, and the deformed quantum symmetries methods, based on

the theory of quantum groups. The aim of this work is to give an introduction to this topic and to prepare the reader to enter the research field quickly. The order of the chapters is "physics first": the mathematics follows from the physical motivations (e.g. gauge field theories) in order to strengthen the physical intuition. The new mathematical tools, in turn, are used to explore further physical insights. A last chapter has been added to briefly trace Julius Wess' (1934-2007) seminal work in the field.