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	Sommario/riassunto	With the unifying theme of abstract evolutionary equations, both linear and nonlinear, in a complex environment, the book presents a multidisciplinary blend of topics, spanning the fields of theoretical and applied functional analysis, partial differential equations, probability

theory and numerical analysis applied to various models coming from theoretical physics, biology, engineering and complexity theory.
The unique features of the book are: the first simultaneous presentation of two complementary approaches to fragmentation and coagulation problems, by weak compactness methods and by using semigroup techniques, comprehensive exposition of probabilistic methods of analysis of long term dynamics of dynamical systems, semigroup analysis of biological problems and cutting edge pattern formation theory. The book will appeal to postgraduate students and researchers specializing in applications of mathematics to problems arising in natural sciences and engineering