Preface

A lot of phenomena investigated in hybrid systems with dry friction, processes of controlled heat transfer, obstacle problems, and others can be described with the help of various differential inclusions, both linear and nonlinear. The theory of differential inclusions is highly developed and constitutes an important branch of nonlinear analysis.

To the best of our knowledge, there were very few monographs concerning the topological theory and dynamics for evolution inclusions. This monograph gives a systematic presentation of the topological structure of solution sets and attractability for nonlinear evolution inclusions and its relevant applications in control theory and partial differential equations. The materials in this monograph are based on the research work carried out by the author and other excellent experts during the past four years. The contents of this book are very new and rich. It provides the necessary background material required to go further into the subject and explore the rich research literature. All abstract results are illustrated by examples.

This monograph deals with the focused topic with high current interest and complements the existing literature in differential equations and inclusions. It is useful for researchers, graduate or Ph.D., students dealing with differential equations, applied analysis, and related areas of research.

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