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Autore	De Santis Elena
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Sommario/riassunto	This book focuses on the observability of hybrid systems. It enables the reader to determine whether and how a hybrid system's state can be reconstructed from sometimes necessarily partial information. By explaining how available measurements can be used to deduce past and future behaviours of a system, the authors extend this study of observability to embrace the properties of diagnosability and predictability.H-systemsshows how continuous and discrete dynamics and their interaction affect the observability of this general class of hybrid systems and demonstrates that hybrid characteristics are not simply generalizations of well-known aspects of traditional dynamics. The authors identify conditions for state reconstruction, prediction and diagnosis of the occurrence of possibly faulty states. The formal approach to proving those properties for hybrid systems is accompanied by simple illustrative examples. For readers who are interested in the use of state estimation for controller design, the book also provides design methods for hybrid state observers and covers their application in some industrial cases.The book's tutorial approach to the various forms of observability of hybrid systems helps to make H-systemsof interest to academic researchers and graduate students working in control and to practitioners using control in an industrial

environment.