1.	Record Nr.	UNINA9910144158603321
	Titolo	Abstract State Machines 2004. Advances in Theory and Practice : 11th International Workshop, ASM 2004, Lutherstadt Wittenberg, Germany, May 24-28, 2004. Proceedings / / edited by Wolf Zimmermann, Bernhard Thalheim
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2004
	ISBN	1-280-30768-4 9786610307685 3-540-24773-4
	Edizione	[1st ed. 2004.]
	Descrizione fisica	1 online resource (XII, 240 p.)
	Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 3052
	Disciplina	511.3
	Soggetti	Computer logic Logic, Symbolic and mathematical Computers Software engineering Programming languages (Electronic computers) Logics and Meanings of Programs Mathematical Logic and Foundations Theory of Computation Software Engineering Mathematical Logic and Formal Languages Programming Languages, Compilers, Interpreters
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	Invited Papers -- Intra-step Interaction -- Closed-Loop Modeling and Related Problems of Embedded Control Systems in Engineering -- An ALGOL-View on Turbo ASM -- An ASM Specification of C# Threads and the .NET Memory Model -- Finite Cursor Machines in Database Query Processing -- Research Papers -- Formalizing Liveness-Enriched Sequence Diagrams Using ASMs -- Specification and Validation of the

Business Process Execution Language for Web Services -- Monodic ASMs and Temporal Verification -- Towards an Interchange Language for ASMs -- Specification and Implementation Problems for C# -- An ASM Semantics for SSA Intermediate Representations -- Observations on the Decidability of Transitions -- A Security Logic for Abstract State Machines -- Slicing Abstract State Machines -- The Cryptographic Abstract Machine -- Modeling Discretely Timed Systems Using Different Magnitudes of Non-standard Reals.

Sommario/riassunto	Abstract state machines (ASM) sharpen the Church-Turing thesis by the c- sideration of bounded resources for computing devices. They view computations as an evolution of a state. It has been shown that all known models of com- tation can be expressed through speci?c abstract state machines. These models can be given in a representation-independent way. That is one advantage of transferring these models to ASM. The main advantage is, however, to provide a unifying theory to all of these models. At the same time ASM can be re? ned to other ASMs. Stepwise re?nement supports separation of concern during so- ware development and will support component-based construction of systems thus providing a foundation of new computational paradigms such as industrial programming, programming-in-the-large, and programming-in-the-world. ASM 2004 continued the success story of the ASM workshops. Previous workshops were held in the following European cities: Taormina, Italy (2003); Dagstuhl, Germany (2002); Las Palmas de Gran Canaria, Spain (2001); Monte Verita, Switherland (2000); Toulouse, France (1999); Magdeburg, Germany (1998); Cannes, France (1998, 1997); Paderborn, Germany (1996); and H- burg, Germany (1994). The ASM workshops have had predecessors, e.g., the famous Lipari Summer School in 1993, whose in?uential outcome was the f- damental Lipari Guide.