1.	Record Nr.	UNINA9910349417903321
	Titolo	Sailing Routes in the World of Computation : 14th Conference on Computability in Europe, CiE 2018, Kiel, Germany, July 30 – August 3, 2018, Proceedings / / edited by Florin Manea, Russell G. Miller, Dirk Nowotka
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
	ISBN	3-319-94418-5
	Edizione	[1st ed. 2018.]
	Descrizione fisica	1 online resource (XV, 434 p. 28 illus.)
	Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 10936
	Disciplina	511.352
	Soggetti	Computer science—Mathematics
		Numerical analysis
		Computer science
		Electronic data processing—Management
		Mathematical Applications in Computer Science
		Numerical Analysis
		Theory of Computation
		IT Operations
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	A Journey To Computably Enumerable Structures (Tutorial Lectures) -- Polynomial-time Presentations of Algebraic Number Fields (Extended abstract) -- Multiple Permitting and Array Noncomputability -- Degrees of Categoricity for Prime and Homogeneous Models -- Universality in Freezing Cellular Automata -- A Deontic Logic Reasoning Infrastructure -- Optimised Program Extraction for Induction and Coinduction -- Computing Tree Width: From Theory to Practice and Back -- Using Structural Properties for Integer Programs -- From Eventually Different Functions to Pandemic Numberings -- Divide and Conquer Computation of the Multi-String BWT and LCP Array -- Some Observations on Infinitary Complexity -- Taming Koepke's Zoo -- Online Computability and Differentiation in the Cantor Space --

Turing's Vision and Deep Learning -- Computing and Scheduling with Explorable Uncertainty -- Diminishable Parameterized Problems and Strict Polynomial Kernelization -- New Nonterminal Complexity Results for Semi-Conditional Grammars -- Kernelization Lower Bounds for Finding Constant-Size Subgraphs -- On General Sum Approximations of Irrational Numbers -- Computability of Ordinary Differential Equations -- Topological Analysis of Representations -- A Unified Framework for Designing EPTAS's for Load Balancing on Parallel Machines -- Weak Reduction Principle and Computable Metric Spaces -- Decidable and Undecidable Fragments of First-Order Concatenation Theory -- Algorithm Analysis through Proof Complexity -- Computing with SAT Oracles: Past, Present & Future -- The Isometry Degree of a Computable Copy of -- Algorithmic Statistics and Prediction for Polynomial Time-Bounded Algorithms -- A c.e. Weak Truth Table Degree which is Array Noncomputable and r-maximal -- The Complexity of Tukey Types and Cofinal Types -- Functionals of Type 3 as Realisers of Classical Theorems in Analysis -- Enumeration Degrees and Topology -- A Taxonomy of Deviant Encodings -- Elementary Bi-embeddability Spectra of Structures -- A Generic m-reducibility -- Some Nonstandard Equivalences in Reverse Mathematics -- Bit Complexity of Computing Solutions for Symmetric Hyperbolic Systems of PDEs (Extended abstract) -- What is the Concept of Computation? -- Witness Hiding without Extractors or Simulators -- Algorithms and Geometric Constructions -- Computing with Multisets : A Survey on Reaction Automata Theory.

Sommario/riassunto	This book constitutes the refereed proceedings of the 14th Conference on Computability in Europe, CiE 2018, held in Kiel, Germany, in July/August 2017. The 26 revised full papers were carefully reviewed and selected from 55 submissions. In addition, this volume includes 15 invited papers. The conference CiE 2018 has six special sessions, namely: Approximation and optimization, Bioinformatics and bio-inspired computing, computing with imperfect information, continuous computation, history and philosophy of computing (celebrating the 80th birthday of Martin Davis), and SAT-solving.