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Titolo	Distributed Computing by Mobile Entities : Current Research in Moving and Computing // edited by Paola Flocchini, Giuseppe Prencipe, Nicola Santoro
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Descrizione fisica	1 online resource (X, 683 p. 405 illus., 66 illus. in color.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11340
Disciplina	004.6
Soggetti	Computer input-output equipment Computers, Special purpose Computer systems Computer networks Robotics Operating systems (Computers) Input/Output and Data Communications Special Purpose and Application-Based Systems Computer System Implementation Computer Communication Networks Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Models -- Robots in LOOK-COMPUTE-MOVE -- Continuous Time Robots -- Agents -- Other Computational Settings.
Sommario/riassunto	Distributed Computing by Mobile Entities is concerned with the study of the computational and complexity issues arising in systems of decentralized computational entities operating in a spatial universe Encompassing and modeling a large variety of application environments and systems, from robotic swarms to networks of mobile sensors, from software mobile agents in communication networks to crawlers and viruses on the web, the theoretical research in this area intersects distributed computing with the fields of computational

geometry (especially for continuous spaces), control theory, graph theory and combinatorics (especially for discrete spaces). The research focus is on determining what tasks can be performed by the entities, under what conditions, and at what cost. In particular, the central question is to determine what minimal hypotheses allow a given problem to be solved. This book is based on the lectures and tutorial presented at the research meeting on "Moving and Computing" (mac) held at La Maddalena Island in June 2017. Greatly expanded, revised and updated, each of the lectures forms an individual Chapter. Together, they provide a map of the current knowledge about the boundaries of distributed computing by mobile entities.

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