

1. Record Nr.	UNINA9910463991203321
Autore	Steigenberge Joachim
Titolo	Worm-like locomotion systems : an intermediate theoretical approach / / Joachim Steigenberger, Carsten Behn
Pubbl/distr/stampa	Munich, Germany : , : Oldenbourg Verlag, , 2012 ©2012
ISBN	3-486-71987-4
Descrizione fisica	1 online resource (207 p.)
Classificazione	ZL 3000
Disciplina	621
Soggetti	Mechanical movements - Mathematical models Worms - Locomotion - Mathematical models Propulsion systems - Mathematical models Friction - Mathematical models Adaptive control systems - Mathematical models Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Matter -- 1 Introduction -- 2 The Straight Worm With Propulsive Spikes ("Spiky") -- 3 The Straight Worm With Propulsive "Friction" -- 4 Adaptive Control of Worms -- 5 Conclusions -- A Mathematical Concepts -- B Mechanical Concepts -- C Control Theory Concepts -- D Notes on Simulation Parameters -- E Some Program Source Codes -- Back Matter
Sommario/riassunto	The book in hand grew out of the authors' current research and their long-continued experience in teaching mathematics and mechanics. In a wide sense, it aims at mathematical modeling of mechanical objects and their exploitation. This is done in a bit unconventional way by concentrating on the special object class worm-like locomotion systems and in proceeding with no use of recent sophisticated mathematical tools which most likely cannot be handled by freshmen in engineering or mathematics. Nevertheless, this does not harm the stringent line the physical object to the analytical interpretation of the final mathematical model. The basic model spiked worm in a straight line enables the authors to come up with a fairly self-contained theory

which then allows one to study effects of friction and control. The considered system class has its importance in practice (motion in narrow canals, e.g.), but this book is not with an orientation to design and application, the theory developed here should rather be seen as a contribution to bionics.

2. Record Nr.	UNINA9910819367703321
Titolo	Ergodic theory : advances in dynamical systems // edited by Idris Assani
Pubbl/distr/stampa	Berlin ; ; Boston : , : Walter de Gruyter GmbH, , [2016] ©2016
ISBN	3-11-046091-2 3-11-046151-X
Descrizione fisica	1 online resource (vi, 141 pages) : illustrations
Disciplina	515/.48
Soggetti	Ergodic theory Differentiable dynamical systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Frontmatter -- Contents -- Duality of the almost periodic and proximal relations / Auslander, Joseph / Greschonig, Gernot -- Limit directions of a vector cocycle, remarks and examples / Conze, Jean-Pierre / Le Borgne, Stéphane -- Optimal norm approximation in ergodic theory / Rosenblatt, Joseph -- The iterated Prisoner's Dilemma: good strategies and their dynamics / Akin, Ethan -- Lyapunov exponents for conservative twisting dynamics: a survey / Arnaud, Marie-Claude -- Takens' embedding theorem with a continuous observable / Gutman, Yonatan -- Authors
Sommario/riassunto	This monograph discusses recent advances in ergodic theory and dynamical systems. As a mixture of survey papers of active research areas and original research papers, this volume attracts young and senior researchers alike. Contents:Duality of the almost periodic and

proximal relations
Limit directions of a vector cocycle, remarks and examples
Optimal norm approximation in ergodic theory
The iterated Prisoner's Dilemma: good strategies and their dynamics
Lyapunov exponents for conservative twisting dynamics: a survey
Takens' embedding theorem with a continuous observable
