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Titolo	Space commercialization [[electronic resource]] : satellite technology / / edited by F. Shahrokhi, N. Jasentuliyana, N. Tarabzouni
Pubbl/distr/stampa	Washington, D.C., : American Institute of Aeronautics and Astronautics, Inc., c1990
ISBN	1-60086-601-8 1-60086-382-5
Descrizione fisica	1 online resource (350 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 128
Altri autori (Persone)	ShahrokhiF JasentuliyanaNandasiri <1938-> TarabzouniN
Disciplina	629.1 s 384.5/1
Soggetti	Artificial satellites Remote sensing Space industrialization - Developing countries Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Technical papers selected from the Symposium on Space Commercialization: Roles of Developing Countries, Nashville, Tennessee, U.S.A., March 1989, and subsequently revised for this volume."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title""; ""Copyright""; ""Table of Contents""; ""Preface""; ""Present and Future Imaging Radar Systems""; ""SPOT: Commercial Policies for an International Remote Sensing System""; ""Satellite Remote Sensing of Water Resources in the Yangtze and Yellow Rivers of China Based on Infrared Imagery of Cloud Distributions""; ""Earth-Orbiting Satellite Imageries for Geodetic Data: A Simulation Study""; ""Remote Sensing Applications to Tectonism in West Tennessee""; ""Satellite Technology in the African Center of Meteorological Applications for Development (ACMAD)"" ""Hydrologic Assessment of Critical Erosion Areas Using Satellite Data and a Geographic Information System""""Applications of High-Resolution Remote Sensing Image Data""; ""Remote Sensing

Applications to Earth Resources Survey in Pakistan"; "Use of the Spectroradiometer LI-1800 to Solve Problems of Preservation of the Environment"; "Chinese Very Small Aperture Terminal System for Ministries"; "Use of Satellite Communication for Technology Development and Transfer in Developing Countries"  
"Low Traffic Density, Small Terminal Network, and Satellite Antenna Design for Communications in the Rural Areas""Payload, Bus, and Launcher Compatibility for Multibeam Mobile Communication Satellite Systems"; "Rupture of the Spit of Sangomar a? Estuary of the Sa?um, Senegal"; "Saudi Arabia's Experience in Solar Energy Applications"; "The Saudi Center for Remote Sensing"; "Agricultural Applications of Remote Sensing in Hungary"; "Yield Prognosis by the Productivity Criteria Using Spectral Signatures in the VIS, NIR and TIR Ranges"  
"Measures for Minimizing Radiation Hazardous to the Environment in the Advent of Large-Scale Space Commercialization""Remote Sensing Activities in Japan"; "Communications and Broadcasting Satellites in Japan"; "Space Research Satellite Program of Japan"; "Mobile Satellite Communications: Applications for Developing Countries"; "Remote Sensing Program of the Federal Republic of Germany"; "Author Index for Volume 128"

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Autore

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Bastien Jerome

Non-smooth deterministic or stochastic discrete dynamical systems  
[electronic resource] : applications to models with friction or impact /  
/ Jerome Bastien, Frederic Bernardin, Claude-Henri Lamarque

London, : ISTE  
Hoboken, N.J., : Wiley, 2013

1-118-60408-3  
1-118-60404-0  
1-299-40244-5  
1-118-60432-6

1 online resource (514 p.)

Mechanical engineering and solid mechanics series

BernardinFrederic  
LamarqueClaude-Henri

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Dynamics - Mathematical models  
Friction - Mathematical models  
Impact - Mathematical models

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	<p>Title Page; Contents; Introduction; Chapter 1. Some Simple Examples; 1.1. Introduction; 1.2. Frictions; 1.2.1. Coulomb's law; 1.2.2. Differential equation with univalued operator and usual sign; 1.2.3. Differential equation with multivalued term: differential inclusion; 1.2.4. Other friction laws; 1.3. Impact; 1.3.1. Difficulties with writing the differential equation; 1.3.2. Ill-posed problems; 1.4. Probabilistic context; Chapter 2. Theoretical Deterministic Context; 2.1. Introduction; 2.2. Maximal monotone operators and first result on differential inclusions (in R)</p> <p>2.2.1. Graphs (operators) definitions 2.2.2. Maximal monotone operators; 2.2.3. Convex function, sub-differentials and operators; 2.2.4. Resolvent and regularization; 2.2.5. Taking the limit; 2.2.6. First result of existence and uniqueness for a differential inclusion; 2.3. Extension to any Hilbert space; 2.4. Existence and uniqueness results in Hilbert space; 2.5. Numerical scheme in a Hilbert space; 2.5.1. The numerical scheme; 2.5.2. State of the art summary and results shown in this publication; 2.5.3. Convergence (general results and order 1/2); 2.5.4. Convergence (order one)</p> <p>2.5.5. Change of scalar product 2.5.6. Resolvent calculation; 2.5.7. More regular schemes; Chapter 3. Stochastic Theoretical Context; 3.1. Introduction; 3.2. Stochastic integral; 3.2.1. The stochastic processes background; 3.2.2. Stochastic integral; 3.3. Stochastic differential equations; 3.3.1. Existence and uniqueness of strong solution; 3.3.2. Existence and uniqueness of weak solution; 3.3.3. Kolmogorov and Fokker-Planck equations; 3.4. Multivalued stochastic differential equations; 3.4.1. Problem statement; 3.4.2. Uniqueness and existence results; 3.5. Numerical scheme</p> <p>3.5.1. Which convergence: weak or strong? 3.5.2. Strong convergence results; 3.5.3. Weak convergence results; Chapter 4. Riemannian Theoretical Context; 4.1. Introduction; 4.2. First or second order; 4.3. Differential geometry; 4.3.1. Sphere case; 4.3.2. General case; 4.4. Dynamics of the mechanical systems; 4.4.1. Definition of mechanical system; 4.4.2. Equation of the dynamics; 4.5. Connection, covariant derivative, geodesics and parallel transport; 4.6. Maximal monotone term; 4.7. Stochastic term; 4.8. Results on the existence and uniqueness of a solution; Chapter 5. Systems with Friction</p> <p>5.1. Introduction 5.2. Examples of frictional systems with a finite number of degrees of freedom; 5.2.1. General framework; 5.2.2. Two elementary models; 5.2.3. Assembly and results in finite dimensions; 5.2.4. Conclusion; 5.2.5. Examples of numerical simulation; 5.2.6. Identification of the generalized Prandtl model (principles and simulation); 5.3. Another example: the case of a pendulum with friction; 5.3.1. Formulation of the problem, existence and uniqueness; 5.3.2. Numerical scheme; 5.3.3. Numerical estimation of the order; 5.3.4. Example of numerical simulations</p> <p>5.3.5. Free oscillations</p>
Sommario/riassunto	This book contains theoretical and application-oriented methods to treat models of dynamical systems involving non-smooth nonlinearities. The theoretical approach that has been retained and underlined in this work is associated with differential inclusions of mainly finite dimensional dynamical systems and the introduction of maximal monotone operators (graphs) in order to describe models of

impact or friction. The authors of this book master the mathematical, numerical and modeling tools in a particular way so that they can propose all aspects of the approach, in both a deterministic

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