1. Record Nr. UNINA9910781535703321

Autore	Wildgen Wolfgang
Titolo	Catastrophe theoretic semantics [[electronic resource]] : an elaboration and application of Rene Thom's theory / / by Wolfgang Wildgen
Pubbl/distr/stampa	Amsterdam ; ; Philadelphia, : J. Benjamins, 1982
ISBN	1-283-35958-8 9786613359582 90-272-8060-6
Descrizione fisica	1 online resource (128 p.)
Collana	Pragmatics & beyond, , 0166-6258 ; ; 3:5
Disciplina	401.43 401/.43
Soggetti	Semantics - Mathematical models Language and languages - Variation Catastrophes (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Bibliography: p. [115]-122.
Nota di contenuto	CATASTROPHE THEORETIC SEMANTICS An Elaboration and Application of Rene Thorn's Theory; Editorial page; Title page; Dedication; Copyrigh page; Table of contents; INTRODUCTION; 1. APPLIED CATASTROPHE THEORY: A SHORT INTRODUCTION; 1.1. A sketch of the mathematical basis; 1.2. Catastrophe Conventions.; 1.3. The finite set of typical paths in the elementary unfoldings; 1.4. An example: the standard cusp; 2. SEMANTICS FROM A DYNAMIC PERSPECTIVE; 2.1. Aspects of dynamic semiotics; 2.2. The type o f semantics aimed at by our model construction 2.3. Formal semantics on the basis of catastrophe theory: a comparison with logical semantics2.4. Principles of interpretation; 2.5. Rene Thorn's list of semantic archetypes; 3. THE HEART OF CATASTROPHE THEORETIC SEMANTICS: THE SET OF SEMANTIC ARCHETYPES; 3.1. The semantic archetypes derivable from the zero-unfolding; 3.2. The semantic archetypes derivable from the fold; 3.3. The semantic archetypes derivable from the cusp; 3.3.1 The standard cusp (A+3); 3.3.2. The dual cusp (A-3); 3.3.3. Versal unfoldings of the standard cusp

3.3.4. Introducing higher archetypes: The archetype of bipolar differentiation3.4 The semantic archetypes derivable from the swallowtail; 3.5 The semantic archetypes derivable from the butterfly; 3.5.1 Sketching the geometry of the standard butterfly (A+5); 3.5.2 Derivations on the basis of the perfect delay convention; 3.5.3. Derivations on the basis of the Maxwell convention; 3.5.4. Some semi-elementary archetypes derivable from the dual butterfly(A-5); 3.5.5. Summary of the archetypes derived from the butterfly; (1) Elementary archetypes.; (2) Semi-elementary archetypes
(3) Higher archetypes3.6 Archetypes derivable from unfoldings with codimension > 4 and corank 1; 3.7 Semantic archetypes derivable from the compactified umbilics (D+4 D-4,D5); 4. APPLICATION OF CATASTROPHE THEORETIC SEMANTICS; 4.1. Dynamic inferences; 4.2 Word semantics; 4.3 Linguistic vagueness; 4.4. Compositional processes; 4.5. Application in neurolinguistics; 5. BEYOND CATASTROPHE THEORETIC SEMANTICS; 5.1. Beyond semantics: towards a dynamic theory of language; 5.2. Beyond Catastrophe Theory; FOOTNOTES; REFERENCES; INDEX

Sommario/riassunto

Rene Thom, the famous French mathematician and founder of catastrophe theory, considered linguistics an exemplary field for the application of his general morphology. It is surprising that physicists, chemists, biologists, psychologists and sociologists are all engaged in the field of catastrophe theory, but that there has been almost no echo from linguistics. Meanwhile linguistics has evolved in the direction of Rene Thom's intuitions about an integrated science of language and it has become a necessary task to review, update and elaborate the proposals made by Thom and to embed them in the f

2. Record Nr. UNINA9910821462003321

Autore	North Gerald R.
Titolo	Energy balance climate models / / Gerald R. North and Kwang-Yul Kim
Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH, , 2017 ©2017
ISBN	3-527-68383-6 3-527-68381-X 3-527-69884-1
Edizione	[1st edition]
Descrizione fisica	1 online resource (370 pages)
Collana	Wiley Series in Atmospheric Physics and Remote Sensing
Disciplina	551.60113
Soggetti	Climatic changes - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Climate and Climate Models -- Global Average Models -- Radiation and Vertical Structure -- Greenhouse Effect and Climate Feedbacks -- Latitude Dependence -- Time Dependence in the 1-D Models -- Nonlinear Phenomena in EBMs -- Two Horizontal Dimensions and Seasonality -- Perturbation by Noise -- Time-Dependent Response and the Ocean -- Applications of EBMs: Optimal Estimation -- Applications of EBMs: Paleoclimate.
Sommario/riassunto	Written by renowned experts in the field, this first book to focus exclusively on energy balance climate models provides a concise overview of the topic. It covers all major aspects, from the simplest zero-dimensional models, proceeding to horizontally and vertically resolved models. The text begins with global average models, which are explored in terms of their elementary forms yielding the global average temperature, right up to the incorporation of feedback mechanisms and some analytical properties of interest. The effect of stochastic forcing is then used to introduce natural variability in the models before turning to the concept of stability theory. Other one dimensional or zonally averaged models are subsequently presented, along with various applications, including chapters on paleoclimatology, the inception of continental glaciations, detection of signals in the climate system, and optimal estimation of large scale

quantities from point scale data. Throughout the book, the authors work on two mathematical levels: qualitative physical expositions of the subject material plus optional mathematical sections that include derivations and treatments of the equations along with some proofs of stability theorems. A must-have introduction for policy makers, environmental agencies, and NGOs, as well as climatologists, molecular physicists, and meteorologists.