

Table of Contents

Acknowledgements	ix
<i>Chapter I. Groundwork</i>	1
1. An Overview of Stability Theory	1
2. Basic Notions And Fundamental Conventions	9
3. Categoricity Of Countable Theories	16
4. Introduction to the Model Theory of Modules	25
5. Non-Structure Theory	30
Part A. Independence	
<i>Chapter II. The Abstract Notion of Independence</i>	35
1. Axioms for Independence	38
2. Further Properties of Independence	46
<i>Chapter III. Forking</i>	53
1. Stable Theories: ϕ -Types, Rank, and Definability	54
2. Types Over Models	62
3. Nonforking Types Over Sets	72
4. $\kappa(T)$ and the Spectrum of Stability	80
5. Definable Chain Conditions in Algebra	92
<i>Chapter IV. Finite Equivalence Relations, Definability, and Strong Types</i>	99
1. Finite Equivalence Relations	99
2. Definability and the Stability Hierarchy	107
3. Strong Types and Multiplicity	112
<i>Chapter V. Indiscernibles In Stable Theories</i>	118
1. Sets Of Indiscernibles	118
2. Comparing Sets of Indiscernibles	127
3. Forking and Dividing	132
<i>Chapter VI. Orthogonality</i>	138
1. Orthogonality Of Types	138

2. Orthogonality of a Type and a Set	148
3. The Dominance Order	153
<i>Chapter VII. Rank</i>	156
1. Ranks and Forking	156
2. A Plethora of Ranks	158
3. Ranks and Stable Groups	163
<i>Chapter VIII. Normalization and T^{eq}</i>	170
1. T^{eq}	170
2. Normalization	176
3. 'Geometric' Stability Theory	180
Part B. Dependence and Prime Models	
<i>Chapter IX. Atomic and Prime Models</i>	187
1. Elementarily Prime Models	188
2. The General Notion of Isolation	192
3. Bookkeeping Axioms for Isolation Relations	201
4. Uniqueness Of Strictly Prime Models	204
5. Locally Atomic Models	208
6. The Number of Models of Strictly Stable Theories	213
<i>Chapter X. Freeness and Isolation</i>	217
1. Axioms Relating Freeness and Isolation	217
2. Powerful Isolation Relations	225
3. Uniqueness of Prime Models	227
4. Indiscernible Sets in Prime Models	230
Part C. Local Dimension Theory	
<i>Chapter XI. Acceptable Classes</i>	235
1. Basic Properties of an Acceptable Class K	235
2. S -Models	238
<i>Chapter XII. Regular Types</i>	241
1. Weak Isolation and Regular Types	241
2. Existence of Strongly Regular Types	249
3. Some Variants on Transitivity	253
4. Strongly Regular Types and Compulsion	256
<i>Chapter XIII. Decomposition Theorems and Weight</i>	262
1. The Decomposition Theorem For S -Models	262
2. Weight	265
3. Ubiquity of Regular Types	272
4. Linear Decomposition of Finitely Generated AT -Models	277

Part D. The Number of Models

<i>Chapter XIV.</i>	The Construction of Many Nonisomorphic Models	283
1.	Many Nonisomorphic Graphs	283
2.	Models with Prescribed Dimensions	285
3.	Tractable Types	290
<i>Chapter XV.</i>	The Width of a Theory	292
1.	Classifying Theories By Width	293
2.	Unbounded Theories	296
3.	Bounded Theories	302
4.	Almost Homogeneous Models	312
<i>Chapter XVI.</i>	The Dimensional Order Property	316
1.	Avatars of the Dimensional Order Property	316
2.	Triviality of Forking	325
3.	DOP Implies Many Nonisomorphic Models	331
<i>Chapter XVII.</i>	NDOP: Theories Without the Dimensional Order Property	341
1.	Normal Trees	342
2.	Decompositions of Models	347
3.	Trees, Labeled Trees and Upper Bounds	350
4.	Quasi-Isomorphisms and Lower Bounds	356
<i>Chapter XVIII.</i>	Vaught and Morley Conjectures for ω -Stable Countable Theories	365
1.	Supportive Types	366
2.	Toward the Vaught and Morley Conjectures	371
3.	The Vaught Conjecture for ω -Stable Countable Theories	377
4.	The Existence of Abnormal Types	383
5.	The Morley Conjecture for ω -Stable Theories	392
	Bibliography	399
	Subject Index	437
	Symbol Index	443