Contents

0	Preliminaries	1
0.1	Introduction	1
0.2	Comments	7
0.3	Preliminaries, conventions and notations	10
1	Types	12
1.1	Types	12
1.2	The omitting types theorem	18
2	Types over models	21
2.1	The fundamental ordering	21
2.2	Heirs, co-heirs and special extensions	25
2.3	Definable types and stable types	31
3	Independence	40
3.1	Forking	40
3.2	Theorem of the finite equivalence relation	47
4	Superstable and ω-stable theories	52
4.1	Superstable theories	52
4.2	Continuous rank	56
4.3	ω-stable theories	60
4.4	Theories of nested equivalence relations	67
4.5	Algebraically closed fields	69
5	Prime models and saturated models	74
5.1	Indiscernible sequences and sets	74
5.2	Prime models of an ω-stable theory	79
5.3	Prime models in the category of slightly saturated models	87

5.4 Existence of saturated models 96

6 Theories categorical in an uncountable cardinal 99
6.1 Morley's theorem 99
6.2 The Baldwin-Lachlan theorem 107

7 Dimension 113
7.1 The ordering $\rhd$ 114
7.2 Regularity 119
7.3 Weight 125

8 The Rudin-Keisler ordering 132
8.1 The Rudin-Keisler ordering 132
8.2 Strongly regular types 135
8.3 Almost orthogonal and orthogonal types 138

9 Bounded theories 144
9.1 Bounded types 144
9.2 Calculation of dimension 151
9.3 Classification of the models of a bounded theory 157

10 Presentable theories 164
10.1 Examples 164
10.2 Presentable theories 168
10.3 Depth 176

Bibliography 185

Index of notation 189

Index of definitions 191