

# Symbol Index

The symbols are organised according to subject matter as follows:

1. Set theoretic notations
2. Basic model theoretic notations
3. Distinguished sets of formulas, theories or types
4. Relations among types, elements and sets.
5. Functions and operators defined in stability theory
6. Classes of models
7. Ranks
8. Specific theories
9. Notations about trees (of models)
10. Notations from algebra
11. Many sorts and  $L^{eq}$
12. Special notations from Chapter XVIII

## 1. Set theoretic notations

|                       |   |
|-----------------------|---|
| $\alpha(\bar{a})$     | image of $\bar{a}$ under $\alpha$ 9                                 |
| $E_i$                 | $\{\bar{e}_j^i < i\}$ 44  |
| $I = \bigcup I$       | a convention 317  |
| $\kappa^\lambda$      | cardinal exponentiation 9   |
| $\lambda^{<\alpha}$   | set of functions from initial segments of $\alpha$ into $\lambda$ 9 |
| $\lambda^\alpha$      | set of functions from $\alpha$ into $\lambda$ 9                     |
| $\text{cf}(\delta)$   | cofinality of $\delta$ 44   |
| $\text{lg}(\bar{a})$  | length of $\bar{a}$ 9   |
| $\text{rng}(\bar{a})$ | range of $\bar{a}$ 9  |
| $\Lambda_\omega$      | ordinals of cofinality $\omega$ 214                                 |
| $\text{mod } \lambda$ | modulo $\lambda$ 287  |
| $\oplus$              | natural sum of ordinals 162   |
| $\text{ded}(\kappa)$  | Dedekind of $\kappa$ 90   |
| $\Delta$              | symmetric difference 177  |

## 2. Basic model theoretic notations

|                  |                   |
|------------------|-------------------|
| $\bar{a} \in M$  | finite sequence 9 |
| $\bar{a} \cup B$ | 9                 |

|                           |  |
|---------------------------|--|
| $\alpha p$                | image of $p$ under $\alpha$ 14                                   |
| $(\exists!^k x)\phi(x)$   | there are exactly $k$ 10   |
| $(\exists! x)\phi(x)$     | there is exactly one 10  |
| $ T $                     | cardinality of $T$ 10  |
| $F^n(B)$                  | $n$ -ary formulas over $B$ 11                                    |
| $F^n(T)$                  | $n$ -ary formulas over set 11                                    |
| $F(T)$                    | formulas over set (some $n$ ) 11                                 |
| $L_{\infty, c^+}(Q_D)$    | infinitary language with dimension quantifiers 6                 |
| $L^{sk}$                  | Skolem language 21   |
| $M \models \phi(\bar{a})$ | $M$ satisfies $\phi$ 9   |
| $\text{cl}(B)$            | algebraic closure 17   |
| Diag                      | diagram 74   |
| $\text{dom } p$           | domain of $p$ 12   |
| $\text{Th}(M)$            | theory of $M$ 9  |
| $\text{Th}(M, B)$         | theory of $M$ with $B$ named 9                                   |
| $M^{sk}$                  | Skolem closure of $M$ 21   |
| $p B$                     | $p$ restricted to $B$ 12   |
| $\phi(M; \bar{a})$        | solutions of $\phi$ in $M$ 9                                     |
| $\phi(\bar{x})$           | first order formula 9  |
| $\phi(\bar{x}; \bar{a})$  | first order formula; $\bar{x}$ free, $\bar{a}$ parameters 12, 57 |