INDEX OF SYMBOLS

This list should be used together with the index of symbols in the book [HMT]. For [HMT] see any one of the lists of references in this volume.

$\underset{\sim}{\Delta}x$, Δx	$\{i\in\alpha : c_i x\neq x\}$; 2, 133, [HMT]
$\Delta^{[V]}x$, $\Delta^{(U)}x$	dimension set of x; 132-3
f^{κ}_{u}	$\{\langle \kappa,u\rangle\}\cup(Dof\sim\{\kappa\})1f$; 4
$f(\kappa/u)$	f^{κ}_{u} ; 4
$f[H/g]$	$H1g \cup (Dof\sim H)1f$; 132
${}^{\alpha}U$	set of functions from α to U; 1,5,[HMT]
${}^{\alpha}_{U}(p)$	$\{q\in{}^{\alpha}U : |q\sim p|<\omega\}$; 5, [HMT]
$D^{[V]}_{\kappa\lambda}$	diagonal element; 4, [HMT]
$C^{[V]}_{\kappa}$	cylindrification; 4, [HMT]
Crs_α, Cs_α, Ws_α, Gs_α, Gws_α	distinguished classes of cylindric-relativized set algebras; 5-6
K^{reg}, Crs_α^{reg}, etc.	class of regular members of K; 6
${}_{\omega}K$, ${}_{\omega}Gws_\alpha$, etc.	class of members of K with all subbases infinite; 106(I.7.20), 134, 72
${}_{\kappa}K$, ${}_{\kappa}Gws_\alpha$, etc.	$\{\mathfrak{A}\in K : (\forall U\in Subb(\mathfrak{A}))|U|=\kappa\}$; 134
K^{norm}, Gws_α^{norm}, etc.	class of normal members of K; 138(0.5)
K^{comp}, Gws_α^{comp}, etc.	class of compressed members of K; 138(0.5)
K^{wd}, Gws_α^{wd}, etc.	class of widely distributed members of K; 138(0.5)
$Gws_\alpha^{comp\ reg}$	$(Gws_\alpha^{comp})^{reg}$; 6 together with 138
K^{oreg}, K^{zdreg}, K^{creg}, K^{ireg}	152(1.6.1)
$R\ell\ K$, $\mathbf{R}\ell\ K$	$\{\mathfrak{Rl}_b\mathfrak{A} : \mathfrak{A}\in K, b\in A\}$; 6
$r\ell_W^{\mathfrak{A}}$	$\langle x\cap W : x\in A\rangle$; 73(I.6.1)
$rl_W^{\mathfrak{A}}$, rl_W^A, $rl^A(W)$, rl_W, $rl(W)$	see $r\ell_W^{\mathfrak{A}}$; 153(2.1)
$Rl_W\mathfrak{A}$, Rl_WA, $Rl(W)A$	universe of $\mathfrak{Rl}_W\mathfrak{A}$; 153(2.1(ii))
$\mathfrak{Rl}_W\mathfrak{A}$, $\mathfrak{Rl}(W)\mathfrak{A}$, $\mathfrak{Rl}(W)A$	$\mathfrak{Sg}^{(\mathfrak{Gs}W)}rl_W{}^{*}A$; 153(2.1(ii))
$\breve{f}$	base-isomorphism induced by f; 37(I.3.5), 155(3.1)

$V^{\sim}$	$\langle V\sim x : x \text{ is a set}\rangle$; [HMT]
$A\sim B$	$\{a\in A : a\notin B\}$; [HMT]
c^{+}	defined if c is an $\langle F,U,\alpha\rangle$-choice function; 86(I.7.1)
Rep(c), Rep(F,U,α,A,c), Rep	representing function of ultraproducts of Crs_{α}-s; 86(I.7.1)
Rep_{c}	$Rep_{c} \stackrel{d}{=} Rep(c)$; 244, 86
ud_{F}^{A}, ud_{F}	diagonal ultrapower sub-base-isomorphism; 162(3.5.1)
ud_{cF}^{A}, ud_{c}	diagonal ultrapower homomorphism if c is an $\langle F,U,\alpha\rangle$-choice function; 181(3.12)
$\twoheadrightarrow$	onto function; 132
$\rightarrowtail$	one-one function; 132
$\rightarrowtail\!\!\!\!\twoheadrightarrow$	one-one and onto function; 132
$\subseteq_{\omega}$	"finite subset of" relation; 132
$Sb_{\omega}\ V$	$\{X : X \subseteq_{\omega} V\}$; 132
Sb V	powerset of V; [HMT]
$\mathfrak{Gb}$ V	full Crs_{α} with unit V; 132
$\mathfrak{Mm}(\mathfrak{A})$	minimal subalgebra of $\mathfrak{A}$; 132
$Mn(\mathfrak{A})$	universe of $\mathfrak{Mm}(\mathfrak{A})$; 132
$Zd\ \mathfrak{A}$	$\{x\in A : \Delta^{(\mathfrak{A})}x=0\}$; 133, 262-3
$\mathfrak{Zd}\ \mathfrak{A}$	$\mathfrak{Gg}^{(\mathfrak{Nr}_{0}\mathfrak{A})}Zd\mathfrak{A}$; 133, 262-3
ZdA, AtA, etc.	the corresponding notions for $\mathfrak{Gg}^{(\mathfrak{Gb}\cup A)}A$; 133
base(V), base($\mathfrak{A}$)	base of; 133(O.1)
Subu(V), Subu($\mathfrak{A}$)	set of subunits of; 133(O.1)
Subb(V), Subb($\mathfrak{A}$)	set of subbases of; 133(O.1)
$\bar{s}$	$\langle s : i\in\alpha\rangle$; 141
$Sm^{\mathfrak{A}}$, Sm	set of small elements of $\mathfrak{A}$; 146(1.2)
$I_{H}^{\mathfrak{A}}$, I_{H}	146(1.3.1)
$Dm_{H}^{\mathfrak{A}}$, Dm_{H}, $Dm_{H}(\mathfrak{A})$	$\{x\in A : \lvert\Delta x\sim H\rvert<\omega\}$; 146(1.3.1)
$\mathfrak{Dm}_{H}^{\mathfrak{A}}$, $\mathfrak{Dm}_{H}$, $\mathfrak{Dm}_{H}(\mathfrak{A})$	subalgebra of $\mathfrak{A}$ with universe Dm_{H}; 146(1.3.1)
$H\text{-}dim^{\mathfrak{A}}$, H-dim	set of almost H-dimensional elements of $\mathfrak{A}$; 195(4.7.2.1)

f^{AB}	base-relation induced by f on A×B; 170
Ud K	class of directed unions of members of K; 203
Uf K	class of ultraroots of members of K; 229 (7.0), [HMT]
Up'K	class of ultrapowers of members of K; 229(7.0), [HMT]
$Dind_\alpha$	$\{\mathfrak{A}\in CA_\alpha : |Zd\mathfrak{A}|\leq 2\}$; 210
rb^ρ, $rb^{(\rho)}$	$rb^{(\rho)} \stackrel{d}{=} rb^\rho$; 191(4.7.1.1)
rd^ρ, $rd^{(\rho)}$	$rd^{(\rho)} \stackrel{d}{=} rd^\rho$; 191(4.7.1.1)
rd_α	$rd^{(\alpha 1 Id)}$; 261
rs_α	289(8.16)
$\mathbf{Rd}_\alpha^{(\rho)}Bo_\beta$	263
Ord	class of all ordinals; 263
CA_H, Cs_H, etc.	H-dimensional CA-s; 222(6.0)
$Rd_H\mathfrak{A}$, $\mathfrak{Nr}_H\mathfrak{A}$	defined for $\mathfrak{A}\in CA_S$, $S\supseteq H$; 222(6.0), [HMT]
$Nr_H\mathfrak{A}$, $\mathfrak{Tr}_H\mathfrak{A}$	defined for $\mathfrak{A}\in CA_S$, $S\supseteq H$; 269, 222(6.0), [HMT]
$\mathfrak{Rf}(\varkappa)$	greatest $Cs_\alpha^{reg}\cap Lf_\alpha$ with base $\varkappa$; 230(7.1)
CA, ICs, etc.	systems of classes of algebras; 263(8.2)
(S1) - (S9)	281(8.13.1)
Crax, Cpax, Rgax	sets of axioms; 281(8.13.2)
$str(\mathfrak{A})$	Crs-structure associated to $\mathfrak{A}$; 281(8.13.3)
$Cyl_\xi(\mathfrak{M})$	Crs_α associated to $\mathfrak{M}$; 281(8.13.3)
Id	identity relation; [HMT]
Do R , *Do*R	domain of R; [HMT]
Rg R , *Rg*R	range of R; [HMT]
A1R	R domain-restricted to A; [HMT]
R^*A	R-image of A; [HMT]
$R^\bigstar x$	$R^*\{x\}$; [HMT]
pj_a	a-th projection; [HMT]
$\Theta\rho$ K	theory of K; [HMT]
$Md\varphi$	class of models of φ; [HMT]

$\mathrm{Su}\,\mathfrak{A}$	set of subuniverses of $\mathfrak{A}$; [HMT]
$\mathbf{S}K$, $\mathbf{S}\mathfrak{A}$	class of subalgebras; [HMT]
$\mathrm{Sg}^{(\mathfrak{A})}X$, $\mathrm{Sg}X$	subuniverse of $\mathfrak{A}$ generated by X; [HMT]
$\mathfrak{Sg}^{(\mathfrak{A})}X$, $\mathfrak{Sg}X$	subalgebra of $\mathfrak{A}$ generated by X; [HMT]
$\mathrm{Ho}\,\mathfrak{A}$	class of homomorphisms on $\mathfrak{A}$; [HMT]
$\mathrm{Is}\,\mathfrak{A}$	class of isomorphisms on $\mathfrak{A}$; [HMT]
$h^{*}\mathfrak{A}$	h-image of $\mathfrak{A}$; [HMT]
$\mathrm{Ho}(\mathfrak{A},\mathfrak{B})$	set of homomorphisms from $\mathfrak{A}$ onto $\mathfrak{B}$; [HMT]
$\mathrm{Is}(\mathfrak{A},\mathfrak{B})$	set of isomorphisms from $\mathfrak{A}$ onto $\mathfrak{B}$; [HMT]
$\mathrm{Hom}(\mathfrak{A},\mathfrak{B})$	set of homomorphisms from $\mathfrak{A}$ into $\mathfrak{B}$; [HMT]
$\mathrm{Ism}(\mathfrak{A},\mathfrak{B})$	set of isomorphisms from $\mathfrak{A}$ into $\mathfrak{B}$; [HMT]
$\mathfrak{A} \preccurlyeq \mathfrak{B}$	$\mathfrak{A}$ is a homomorphic image of $\mathfrak{B}$; [HMT]
$\mathbf{H}K$, $\mathbf{H}\mathfrak{A}$	class of homomorphic images; [HMT]
$\mathbf{I}K$, $\mathbf{I}\mathfrak{A}$	class of isomorphic images; [HMT]
$\mathrm{Co}\,\mathfrak{A}$	set of congruence relations on $\mathfrak{A}$; [HMT]
$\mathrm{Il}\,\mathfrak{A}$	set of ideals of $\mathfrak{A}$; [HMT]
$\mathrm{Ig}^{(\mathfrak{A})}X$, $\mathrm{Ig}\,X$	ideal generated by X; [HMT]
$\mathrm{P}\mathfrak{B}$, $\mathrm{P}_{i\in I}\mathfrak{B}_i$	direct product of $\mathfrak{B}$; [HMT]
$\mathbf{P}K$	class of isomorphic images of direct products; [HMT]
$\mathbf{Up}\ K$	class of isomorphic images of ultra-products; [HMT]
$\mathfrak{B} \underline{\subset}^{r} \mathfrak{A}$	$\mathfrak{B}$ is a subreduct of $\mathfrak{A}$; [HMT]
$\cup^{r}\ K$	reduct union of K; [HMT]
$\langle A,+,\cdot,-,0,1\rangle$	Boolean algebra; [HMT]
BA	class of all Boolean algebras; [HMT]
$\sum^{(\mathfrak{A})}$, $\sum$	sup; [HMT]
$\prod^{(\mathfrak{A})}$, $\prod$	inf; [HMT]
$\langle A,+,\cdot,-,0,1,c_{\kappa},d_{\kappa\lambda}\rangle_{\kappa,\lambda<\alpha}$	cylindric algebra; [HMT]
$\mathfrak{Bl}\ \mathfrak{A}$	$\mathfrak{Rl}_{0}\mathfrak{A}$; 263, [HMT]
c_{κ}^{∂}	dual cylindrification; [HMT]
s_{λ}^{κ}	substitution operation, λ for κ; [HMT]

${}_{\mu}s^{(\varkappa,\lambda)}$	substitution operation, interchanging $\varkappa$ and λ; [HMT]
$Cl_{\Gamma}\mathfrak{A}$, $\mathfrak{Cl}_{\Gamma}\mathfrak{A}$	BA of Γ-closed elements of $\mathfrak{A}$; [HMT]
$c_{(\Gamma)}$	generalized cylindrification; [HMT]
d_{Γ}	generalized diagonal element; [HMT]
$\bar{d}$ R	generalized co-diagonal element; [HMT]
Lf_{α}	class of all locally finite CA_{α}-s; [HMT]
Dc_{α}	class of all dimension-complemented CA_{α}-s; [HMT]
Mn_{α}	class of all minimal CA_{α}-s; [HMT]
$\mathfrak{Nr}_{(\rho)}\mathfrak{B}$, $\mathfrak{Nr}_{\rho}\mathfrak{B}$	ρ-reduct of $\mathfrak{B}$; 263, [HMT]
$\mathbf{Rd}_{\alpha}^{(\rho)}K$, $\mathbf{Rd}_{\alpha}K$	class of reducts; [HMT]
$\mathbf{Nr}_{\alpha}K$	class of neat-reducts; [HMT]
Bo_{α}	class of all BA-s with operators; [HMT]
$At\mathfrak{A}$	set of atoms of $\mathfrak{A}$; p.225 of [HMT]
$\oplus$	symmetric difference; [HMT]
R|S	relative product of the relations R and S; [HMT]
$a_{\varkappa}^{\mathfrak{A}}$, $a_{\varkappa}$	$c_{(\varkappa)}\bar{d}(\varkappa\times\varkappa)$; 234(7.3.1), [HMT]
at(x)	formula; 234(7.3.1)
Cr_{α}	$\mathbf{R}\ell$ CA_{α} ; [HMT]
$\mathfrak{B} \subseteq_{d} P\mathfrak{A}$	$\mathfrak{B}$ is a subdirect product of $\mathfrak{A}$; [HMT]
ker(f)	$\{\langle x,y\rangle : \exists z(\langle x,z\rangle\in f \text{ and } \langle y,z\rangle\in f)\}$; 238

INDEX OF DEFINED TERMS

This list should be used together with the "index of names and subjects" of the book [HMT].