Index

She said that indexing was a thing that only the most
amateurish author undertook to do for his own book.
Kurt Vonnegut, *Cat’s Cradle*, 1963

accessible
diameter —, 300
group, 300
group, 302
action
cobounded, 10
geometric, 10
locally bounded, 10
metrically proper, 10
micro-supported, 273
amenable, 5, 14, 172, 274, 278, 282, 288, 344, 347
action, 175, 176
geometrically —, 15
metrically —, 282
radical, 5, 224
Benjamini–Schramm topology, 198
Borel density, 193
boundary, 15, 94, 132, 175, 256, 271, 284
Furstenberg–Poisson —, 175
branch
group, 27
Burger–Mozes
lattices, 179
universal groups, 102, 124
C-stable, 269
locally —, 270
Cayley–Abels graph, 7, 11, 230, 239, 283
centraliser lattice, 270
Chabauty space, 169, 187, 344
classifier
equivalent Euler —, 220
subgroup, 22, 228, 237, 257
characteristically simple, 228, 237, 257
course
dense
Borel —, 193
geometrically —, 98
elementary
group, 236, 240, 351
hyperbolic group, 284
non — hyperbolic group, 278
radical, 237
elliptic
automorphism, 95, 149, 271
locally —, 229, 316, 344
locally — radical, 229, 255, 316
purely —, 97
focal hyperbolic group, 278
Galois group, 19, 74, 353
geometrically dense, 98
Gleason–Yamabe theorem, 5
graph
accessible —, 300
Cayley–Abels —, 7, 11, 230, 239, 283
Gromov–Hausdorff topology, 197

connectedness, 11
equivalence, 10, 221
simple connectedness, 12
cohomology
abstract —, 87
continuous —, 30, 87, 208, 211, 212
$L^2$ —, 211, 212
reduced —, 208
connected, 311
compact presentation, 13, 305
contraction group, 39, 52, 162, 277, 345
nub, 167
core, 78, 126
Tits —, 169

© in this web service Cambridge University Press
www.cambridge.org
Index

Higman–Thompson groups, 139
hyperbolic automorphism, 95, 149, 271
group, 276 focal —, 278 purely —, 97
independence property, 100, 122
invariant random subgroup, 189
irreducible lattice, 171
IRS, 189
just infinite, 171
Kazhdan property, 174, 347
Kazhdan–Margulis theorem, 194
$L^2$-Betti numbers, 205, 220
lattice, 171
Burger–Mozes —, 179
centraliser —, 270
cocompact —, 171
irreducible —, 171
local decomposition —, 268
non-existence thereof, 191, 348
structure —, 260, 268
uniform —, 171
Lazard theorem, 26, 32, 53
Levi factor, 55, 163
Lie group, 5, 11, 37, 45, 188, 277
$p$-adic —, 37, 45, 155, 344
local action, 103, 120
local decomposition lattice, 268
locally C-stable, 270
elliptic, 229, 316, 344
equivariant radical, 229, 255, 316
equivalent, 267
normal, 258, 267
micro-supported, 273
millefeuille, 286
minimal normal subgroup, 227, 232, 255
minimising subgroup, 146
Neretin group, 131, 191, 344
non-elementary group, see elementary group
hyperbolic group, 278
normal subgroup
dense —, 345, 346
locally —, 258, 267
minimal —, 227, 232, 255
theorem, 171, 195
normal subgroup theorem, 171
nub, 167
parabolic subgroup (of an automorphism), 162
proximal (strongly), 272
quasi-centraliser, 261, 269
quasi-discrete, 251
quasi-product, 255
radical amenable —, 5, 224
elementary —, 237
locally elliptic —, 229, 255, 316
rank construction —, 248
Hattori–Stallings —, 217
of a topological group, 88
residually discrete, 241
scale function, 146, 163
simple abstractly —, 93, 101, 106, 109, 124, 125, 128, 143, 169, 346
characteristically —, 228, 237, 257
lattice, 179
spheromorphism, see Neretin group strongly proximal, 272
structure lattice, 260, 268
theorem Gleason–Yamabe, 5
Kazhdan–Margulis, 194
Lazard, 26, 32, 53
normal subgroup, 171
Tits simplicity, 101, 125, 141
van Dantzig, 2, 230, 241, 258
Zassenhaus, 188
tidy subgroup, 51, 147, 162
Tits core, 169
Tits independence property (P), 100, 122
Tits simplicity theorem, 101, 125, 141
topology
Benjamini–Schramm —, 198
Gromov–Hausdorff —, 197
ultrametric absolute value, 40
field, 42
inequality, 40
uniform lattice, 171
universal groups
Burger–Mozes —, 102, 124
Smith —, 124
van Dantzig theorem, 2, 230, 241, 258
Zassenhaus theorem, 188