

Index of Symbols

- | | |
|---|---|
| <p> $A(\xi)$, 8
 $A(f)$, 186, 236
 $A(f, b)$, 186
 $A^*(\xi)$, 8
 $A_1(f, b)$, 186
 $A_2(f, b)$, 186
 $A_j^*(\omega)$, 104
 $A_l(f)$, 318
 $\alpha(z)$, 84
 $\alpha_l(\omega)$, 116
 $\text{Attr}(f)$, 223
 $\text{AsymptV}(f^n)$, 64

 β, 236
 \mathcal{B}, 78
 \mathcal{B}_{j+1}, 350
 \mathcal{B}_{j+1}^1, 350
 $B_b^k(R)$, 185
 B_R^+, 215
 B_R^1, 215
 $B_\infty(R)$, 79, 358
 $B_\infty^*(R)$, 79
 $B_b(R)$, 184
 $B_b^*(R)$, 185
 $B_b^k(R)$, 321

 $C_b(J(f))$, 446
 $\text{Comp}(z, f^n, 2\gamma)$, 236
 $Cr_i(f)$, 245
 $\text{Crit}(f)$, 175
 $\text{Crit}_\infty(f)$, 242
 $\text{Crit}_c(f)$, 242
 $\text{Crit}_c(z)$, 246
 $\text{Crit}_c(J(f))$, 243
 $\text{Crit}_h(f)$, 353, 357 </p> | <p> $\text{Crit}_p(f)$, 242
 $\text{Crit}_r(f)$, 222
 $\mathbb{C}(\wp)$, 149
 $\mathbb{C}(\wp, \wp')$, 149
 $c_1 < c_2$, 244
 (CNR), 242

 D_μ, 459
 $\text{DD}_\chi(J(f))$, 192
 $\text{DD}_h(J(f))$, 192
 $\Delta_j(\omega, \alpha)$, 367
 $\Delta(\Lambda)$, 157
 Δ_p, 156
 $\deg(f)$, 135
 δ_i, 247

 $E_i(f)$, 247
 $\eta_0(f)$, 181
 $\eta_1(f, x)$, 226
 e_1, e_2, e_3, 156
 $\mathcal{E}_\infty(\Lambda)$, 149
 $\mathcal{E}(\Lambda)$, 149

 $F(f)$, 5
 \hat{f}, 134, 187
 $f_2^{-1}(\infty)$, 55
 $f^{-n}(A)$, 4
 $f^{-n}(\infty)$, 4
 f_G^{-n}, 57
 $f_{b_2, b_1, j}^{-1}$, 188

 g_2, 147
 $g_2(\Lambda)$, 157
 g_3, 147 </p> |
|---|---|

- $g_3(\Lambda)$, 157
 $g_{\mathbb{Z}}(w)$, 362
 H'_e , 335
 H'_s , 335
 \hat{H} , 448
 h_- , 317
 $\hat{h}(\infty)$, 472
 $L_-(f)$, 214, 248
 $I_R(f)$, 209, 216
 $I_{R,e}(f)$, 210
 $I_\infty(f)$, 84, 209
 $J(\hat{f})$, 187, 360
 $J(f)$, 5, 7
 $J(f)_{er}(f)$, 192
 $J_r(f)$, 192, 195
 $J_{\mu_h}(\infty)$, 352
 $K(V)$, 375
 $K_J(V)$, 190, 198
 κ_c , 317
 Λ_f , 125, 128, 174
 \mathcal{L}_0 , 447
 \mathcal{L}_e , 446
 \mathcal{L}_s , 446
 l_∞ , 255
 $M(t, r)$, 195
 M_+ , 428
 M_- , 428
 \mathcal{M}_f^∞ , 352
 $\hat{\mathbb{T}}_f$, 134
 $\mathfrak{D}_I(\hat{V})$, 389
 \hat{m} , 360
 $\mathbb{T}_f^{(l)}$, 375, 412
 $\mathbb{T}_\Lambda := \mathbb{C}/\Lambda$, 133
 \mathbb{T}_f , 134
 $\hat{\mu}$, 360
 $N(c)$, 135
 N_f , 226
 N_f^* , 227
 (NR) , 222
 $O^+(z)$, 6
 $O_+(A)$, 223
 $\Omega(f)$, 110, 228
 $\Omega_0(f)$, 110
 $\omega(z)$, 83
 $\omega \in \mathbb{C}$, 110
 $\text{ord}(f)$, 135
 $\overline{\text{PC}_c^0(f)_i}$, 247
 $\overline{\text{PC}_c(f)_i}$, 247
 $\text{PC}(f)$, 243
 $\text{PC}^0(f)$, 243
 $\text{PC}_\infty^0(f)$, 243
 $\text{PC}_c^0(f)$, 243
 $\text{PC}_p^0(f)$, 243
 $\text{PC}_\infty(f)$, 243
 $\text{PC}_c(f)$, 243
 $\text{PC}_p(f)$, 243
 $\text{PC}(\hat{f})$, 187, 360
 $\text{PS}^0(f)$, 460
 $\text{PS}_-(f)$, 460
 $\text{PS}(f)$, 58
 $\text{PSL}(2, \mathbb{Z})$, 130
 Π_e^h , 336
 Π_e^t , 335
 Π_s^t , 335
 Π_Λ , 133
 Π_f , 134
 $Q(f)$, 476
 $Q_n(f)$, 476
 q , 184
 q_b , 184
 q_c , 255
 $q_{\max}(f)$, 184
 $R_l(f)$, 318
 \mathcal{R}_f , 174
 $\hat{\rho}$, 361
 ρ , 460
 ρ_e , 427, 446
 ρ_s , 427, 446
 $S(x, \alpha)$, 89
 $S_0(x, \alpha)$, 94
 $S_R(\omega)$, 367
 $S_\phi^A(x, \alpha)$, 94
 $S_f^i(f)$, 247
 Σ_l , 210
 $\text{Sing}(f^{-n})$, 58
 $\text{Sing}^-(f)$, 248
 $\text{Sing}^-(f)$, 248
 Sing_+ , 470
 Sing_- , 470
 $\sigma(z)$, 151

512

Index of Symbols S , 78 $s(V)$, 199 $T(f)$, 185 T_w , 195 $Tr(f)$, 328 τ , 130 θ , 236 θ_S , 188 $U_n(f)$, 15 \tilde{u}_Q , 467 u , 460 u_R , 466 $V_n(f)$, 14 \wp , 143 \wp_Λ , 143 \wp_Λ , 166 $\|f'\|_E$, 310 \sim_Λ , 131 \sim_f , 174 \sim_{Λ_f} , 174

Subject Index

- α -limit set, 84
- ω -limit set, 83
- t -conformal measure, 194
- w -nested sequence, 352

- Ahlfors' Five-Island Theorem, 12
- algebraic inverse connected chain, 42, 50
- almost t -conformal measure, 196
- asymptotic point, 37, 38
- asymptotic tract, 52
- asymptotic value, 37, 38, 64
- attracting directions, 86
- attracting periodic point, 8
- attracting sectors, 103, 111

- backward orbit, 6
- Baker domain, 17
- basis for a lattice, 128
- branch of f^{-n} , 52

- cohomologous function, 460
- compactly nonrecurrent, 242
- complex torus, 133
- conformal infinite iterated function system, 188
- congruence mod Λ , 131
- congruent points, 131
- conservative measure, 328, 394, 425
- Cremer periodic point, 12
- crossing set, 198

- discrete subset, 126
- discriminant, 156

- doubly periodic, 133
- doubly periodic function, 128

- elliptic function, 133
- ergodic measure, 328, 394, 425
- escaping set, 84
- exceptional point, 7
- expanding, 256, 380
- exponential shrinking, 259
- exponential shrinking on \mathbb{C} , 257

- Fatou coordinates, 98
- Fatou Flower Theorem, 111
- Fatou set, 5
- finite character, 256
- first dynamical dimension, 192
- forward orbit, 6
- fundamental parallelogram, 131, 174
- fundamental region, 131

- Herman ring, 17
- homogeneity of \wp_Λ , 167
- homogeneity of \wp'_Λ , 167
- horizontal, 389

- immediate basin of attraction, 16
- indifferent periodic point, 8
- invariant component, 16
- invariant line fields, 460
- inverse connected chain, 40
- irrationally indifferent periodic point, 8

- Julia set, 5
- Julia set of elliptic function, 184

- lattice, 128
 Leau–Fatou domain, 17
 linearizable map, 10
- Möbius transformation, 130
 Mañé’s Theorem, 223
 modular group, 130
 modulus of the basis, 130
 multiplicity of the pole, 184
 multiplier, 8
- nonrecurrent, 222
 normal, 255
 normal subexpanding elliptic function of finite character, 393
- order of elliptic function, 135
- parabolic elliptic function, 261, 411, 445
 parabolic elliptic functions of finite class, 428
 parabolic elliptic functions of infinite class, 445, 457
 parabolic elliptic functions with finite measure μ_h , 428
 period of function, 125
 period of point, 8
 periodic component, 16
 periodic point, 7
 Perron–Frobenius operator, 446
 post-singular set, 58
 preperiodic component, 15
 preperiodic point, 12
 prepole, 4
 pseudo-compact, 310
- quasi-expanding, 380
- radial Julia set, 195
 radial (or conical) expanding points, 191
 radial (or conical) points, 191
 rationally indifferent (parabolic) periodic point, 8, 17
 real function, 168
 real lattice, 167
 real rectangular lattice, 167
 real rhombic lattice, 167
 real rhombic square, 171
 recurrent critical points, 222
 regular, 256
 regular elliptic function, 255
 regular point, 57
 repelling directions, 86
 repelling periodic point, 8
 repelling sectors, 103, 111
 Ruelle’s Inequality, 191
- second dynamical dimension, 192
 semi- t -conformal measure, 194
 semi-expanding, 256
 set of points escaping to ∞ , 84
 set of transitive points, 328
 Siegel disk, 17
 Siegel periodic point, 10
 similar lattices, 130
 simple parabolic fixed point, 110
 simple periodic function, 128
 simple rationally indifferent (parabolic) fixed point, 8, 85
 singular point, 58
 small nice set, 396
 spherical t -conformal pair of measures, 194
 square lattice, 167
 subexpanding, 256, 395
 super-attracting periodic point, 8
- tessellation, 132
 topologically exact, 184
 transcendental inverse connected chain, 42, 50
 transcendental meromorphic function, 5
 transfer operator, 446
 triangular lattice, 167
- wandering components, 16
 weakly semi-expanding, 256
 Weierstrass σ -function, 151
 Weierstrass elliptic function, 143, 166
 Weierstrass normal form of p , 156