

Index

- atom
 - tent space, 22
 - Z -space, 27
- atomic decomposition
 - of tent spaces, 22
 - of Z -spaces, 28
- bisectorial operator, 45
- boundary value problem, 2, 127
 - Dirichlet, 2, 128
 - Neumann, 4, 127
 - Regularity, 3, 127
- Calderón reproducing formula, 58
- Calderón siblings, 59
- Carleson operator, 21, 23
- Cauchy operator
 - on DB -adapted BHS spaces, 85
 - on adapted BHS spaces, 71
 - on $\overline{\mathcal{R}(A)}$, 48
- Cauchy–Riemann system, 8
 - anti-, 95
 - classification of solutions, 11, 99
 - equivalence with elliptic equation, 9
- completion
 - canonical, 66
 - of D -adapted spaces, 77
 - of a quasinormed space, 66
 - of adapted BHS spaces, 66
 - weak-star, 66
- conormal derivative, 4
- conormal gradient, 9
- contraction operator, 55
- De Giorgi–Nash–Moser condition, 98, 132, 140, 141
- Dirac operator, 8, 75
 - perturbed, 8, 75
 - satisfies Standard Assumptions, 51
- downward shift, 33
- duality
 - \heartsuit -, 20
 - of adapted BHS spaces, 64, 68
 - of canonical completions, 68
 - of exponents, 19
 - of identification regions, 80
 - of inclusion regions, 80
 - of slice spaces, 35
 - of tent spaces, 23
 - of well-posedness, 130
 - of Z -spaces, 26, 29
- duality pairing
 - L^2 -, 23
- dyadic characterisation
 - of slice space, 36
 - of Z -space, 25
- elliptic equation, 1
 - basic properties of solutions, 95
 - boundary behaviour of solutions, 121
 - classification of solutions, 99, 100
 - decay of solutions, 96
 - equivalence with Cauchy–Riemann system, 9
 - representation of solutions
 - by layer potentials, 141
 - solution space, 120
- embedding
 - of adapted BHS spaces, 64
 - of exponents, 20
 - of slice spaces, 35
 - of tent spaces, 23
 - of tent- and Z -spaces, 32
- exponent, 19
 - energy, 128
 - finite, 19
 - infinite, 19
- extension operator, 55
- extrapolation
 - of identification region, 82
 - of well-posedness, 129
- functional calculus
 - bounded H^∞ , 47
 - holomorphic, 45
 - on adapted BHS spaces, 65, 69
 - on canonical completions, 69
 - similarity, 77

- I_{\max} , 80
- I_{\min} , 81
- interpolation
 - of adapted BHS spaces, 70
 - of canonical completions, 70
 - of exponents, 20
 - of inclusions of adapted BHS spaces, 71
 - of mutual well-posedness, 129
 - of smoothness spaces, 39
 - of solution spaces, 119
 - of tent spaces, complex, 23
 - of tent spaces, real, 25, 30
 - of Z -spaces, complex, 31
 - of Z -spaces, real, 31
- layer potential, 140
 - double, 141
 - jump relations, 144
 - representation by Cauchy operator, 142
 - single, 142
- Lusin operator, 21
- nondegenerate
 - holomorphic function, 46
- off-diagonal estimates, 49
- region
 - classification, 99
 - identification, 79
 - openness, 82
 - inclusion, 70
 - well-posedness, 127
 - for specific coefficients, 132
- Riesz potential, 37
- space
 - adapted Besov–Hardy–Sobolev, 62
 - characterisation by Cauchy operator, 73, 85
 - characterisation by contraction maps, 63
 - D -adapted, 75
 - positive and negative, 62, 65
 - Besov, 37
 - BMO-Sobolev, 38
 - Hölder–Lipschitz, 38
 - Hardy–Sobolev, 37
 - slice, 34
 - smoothness, 39
 - solution, 119
 - tent, 21
 - vanishing, 131
 - VMO, 131
 - Wiener amalgam, 31, 36
 - X -, 31
 - Z -, 24
- spectral projection, 48
- spectral subspaces, 48
- Standard Assumptions, 51
- tempered distributions modulo polynomials, 36
- well-posedness, 127
 - characterisation, 128
 - compatible, 129
 - incompatible, 137
 - mutual, 129
 - topological characterisation, 130
 - stability in coefficients, 137
- Whitney average, 24
- Whitney cube, 25
- Whitney grid, 25
- Whitney parameter, 24
- Whitney region, 24