

Index

- Admissible:
 domain, 82
 maximal function, 89
- Admissible limits:
 in L^p , 120
 of Poisson integrals, 82
 of potentials, 107
- Ahern, P., 42
- Approximate identity, 36
- Arazy, J., 154
- Area integral, 94, 160
- Arsove, M., 107
- Automorphism, 9
 for ball, 11
 for polydisc, 41
- Beatrous, F., 154
- Bergman kernel, 13
 for ball, 16
 for polydisc, 18
- Bergman metric, 20
 for ball, 22
- Bergman space, 6, 153
- Besov spaces, 154
- Biholomorphic, 9
- Blaschke product, 113, 124
- Bonami, A., 44
- Boundary measure, 64
- Bounded symmetric domain, 2, 40
- Burbea, J., 154
- Cargo, G.T., 124
- Cauchy-Szegő kernel, 44
- Cima, J., 107, 120
- Convolution, 34
- Demaily, J.P., 79
- Dirichlet problem:
 for ball, 48
 for rB , 56
- Dirichlet space, 6, 153
- Fatou, P., 81
- Fatou's theorem, 81, 95
- Fisher, J., 154
- Flores, M., 42
- Function:
 biholomorphic, 9
 harmonic, 1
 holomorphic, 8
 invariant harmonic, 3, 4, 31
 \mathcal{M} -harmonic, 4, 31
 \mathcal{M} -subharmonic, 31
 \mathcal{M} -superharmonic, 31
 n -harmonic, 2, 24
 n -subharmonic, 41
 pluriharmonic, 2, 9
 plurisubharmonic, 9
 radial, 26
- Furstenberg, H., 3, 53, 56, 58
- Gardiner, S.J., 125
- Garnett, J.P., 51
- Geller, D., 95
- Gindiken, S. G., 44
- Godement, R., 40
- Gradient, 27
- Graham, C.R., 51
- Green's formula, 23
- Green's function, 60
 for invariant laplacian, 65
 pluricomplex, 79
- Green potential:
 of measure, 71
 of function, 107
- Hahn, K.T., 65, 125, 126, 154
- Hardy, G.H., 149
- Hardy space, 52, 75

- Harmonic:
 euclidean, 1
 invariant, 3, 4, 31
 \mathcal{M} -harmonic, 4, 31
 n -harmonic, 2, 24
 pluriharmonic, 2, 9
 strongly, 3, 40
 weakly, 3, 31
- Harnack's inequality, 61
- Heins, M., 124
- Holomorphic function, 8
- Homogeneous domain, 2
- Hörmander, L., 56
- Hua, L. K., 5, 44
- Huber, A., 107
- Hyperconvex, 79
- Hypoadmissible, 93
- Hyporadial, 93
- Invariant:
 convolution, 34
 gradient, 27
 harmonic, 3, 4, 31
 laplacian, 1, 23
 measure, 19
 potential, 71, 74
 Riesz kernel, 133
 Riesz operator, 132
 Riesz potential, 127
 subharmonic, 31
- Isotropic, 45
- Jansen, S., 154
- Karpelic, F. I., 58
- Koranyi, A., 44, 53, 82
- Krantz, S., 48, 51
- Laplacian, 1
- Laplace-Beltrami operator, 1, 23
 for ball, 25
 for polydisc, 4, 24
 radial form, 26
- Least \mathcal{M} -harmonic majorant, 61
- Li, S.-Y., 79
- Limits:
 admissible, 82
 in L^p , 120
 tangential, 114
- Littlewood, J.E., 149
- Littlewood's theorem, 96
- Locally integrable, 33
- Lohoué, N., 44
- Marcinkiewicz, J., 81
- Maximal function:
 of measures, 83
 radial, 104
- Maximum principle, 33
- Mean value inequality, 31, 142
- \mathcal{M} -harmonic:
 function, 4, 31
 majorant, 61
- Michelson, H. L., 58
- Mitchel, J., 58, 65
- Möbius group, 11
- Monge-Ampere operator, 80
- \mathcal{M} -subharmonic, 31
- \mathcal{M} -superharmonic, 31
- n -harmonic, 2, 24
- Noneuclidean disc, 34
- Nonisotropic:
 ball, 46
 capacity, 123
 metric, 46, 85
- Nontangential limit, 81
- n -subharmonic, 41, 58
- Orthogonal group, 10
- Pavlovic, M., 160
- Peetre, J., 154
- Peloso, M., 154
- Pluriharmonic, 2, 9
- Plurisubharmonic, 9
- Poisson kernel, 44, 45
- Poisson-Szegö:
 integral, 51
 kernel, 44
- Potential, 71, 74
- Putz, R., 95
- Radial function, 26

- Radial limit:
 of Poisson integrals, 92
 of potentials, 96
 Radial maximal function, 104
 Reinhardt set, 15
 Riesz:
 decomposition theorem, 70
 kernel, 126, 133
 measure, 40
 operator, 132
 potential, 127
 Rudin, W., 42
 Shur's theorem, 139
 Sjögren, P., 95
 Stanton, C. S., 107, 120
 Stein, E. M., 81, 95
 Strongly harmonic, 3, 40
 Subharmonic:
 invariant, 31
 \mathcal{M} -subharmonic, 31
 n -subharmonic, 41, 58
 plurisubharmonic, 9
 strongly, 41
 Support of a measure, 127
 Symmetric domain, 2
 Szegö kernel, 44
 Tangential:
 area integral, 162
 boundary limit, 114
 region, 114
 Ullrich, D., 53, 61, 65
 Unitary group, 10
 Upper derivate, 88
 Weakly harmonic, 3, 31
 Weakly subharmonic, 31
 Weiss, N. J., 81
 Wu, Jang-Wei, 115
 Yamashita, S., 75
 Yousffi, E. H., 126, 154
 Ziomek, L. 120
 Zygmund, A., 81