

List of Symbols

Symbol	Definition	Page
$ \cdot $	Complete norm	1
U	A Unitary operator	15
(T)	Kazhdan's property	15
K	Kazhdan's set	15
ε	Kazhdan's constant	15
(K, ε)	Kazhdan's pair	15
$\otimes$	Tensor product	16
V	Volterra operator	26
σ	Spectrum	27
$\oplus$	Direct sum	31
I	Identity operator	61
ϑ	Poisson measure	61
D	Unit disc	82
Hol	Holomorphic	82
$\bar{\Omega}$	Closure	83
∂	Boundary	83
$L^0(R)$	Measurable functions	84
R_n	Rademacher functions	104
f^B	Fractional derivative	106
P_z	Poisson kernel	116
BMO	Bounded Mean Oscillation	116
K_z	Bergman kernel	125
H^p	Hardy space	127
$L^S_{weak(X)}$	Bounded sequences spaces	128
$\mathcal{H}$	A Hilbert space	142
μ	Carleson measure	144
$\mathcal{I}$	Identity matrix	144
Θ_n^L	Matrix-valued Blaschke-Potapov product	145
H_{cw}^1	Hardy space of Coifman Weiss	170
$\nabla(\sqrt{-\nabla})^{-1}$	Riesz transform	170
$S_i(Q)$	The Scaled Corona around the ball	171
$H_{\varepsilon, mol}^1$	Molecular Hardy space	172
$H_{F, \varepsilon mol}^1$	Finite molecular decompositions	173
H_{ato}^1	Atomic space	173
H_L^1	A Hardy space by maximal operator	174
$M_s^\#(f)(x)$	A Sharp maximal function	183
M_{HL}	Maximal Hardy Littlewood operator	183
e^{tL}	The heat semi-group	188

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