

Index Seite 3 Stand: 2025-07-31 rana, ulgr

Jordan decomposition	364, 421	
Kakutani-Krein theorem	240, 297, 313, 334	
Kato's	equality	138ff, 285ff, 325ff
	inequality	139, 286ff, 258ff, 285
	classical	138ff, 258ff
	distributional	
Krein-Rutman theorem	130, 167, 334	
Laplace transform	101, 107	
Laplacian	34ff, 100, 110, 139, 168, 185, 205, 250ff, 258, 338	
Lattice	homomorphism	120, 243, 244, 281
	norm	235
Locality	146ff, 268ff, 282, 287	
Long term behavior	98ff, 204ff, 342ff, 352, 406ff	
Lumer-Phillips theorem	53ff	
Markov	algebra homomorphism	143ff
	lattice homomorphism	120, 192ff, 200ff
	operator	120, 191
	process	213ff
	semigroup	144, 191
	transition function	213ff, 347ff
Matrix semigroup	9ff	
Maximum principle	165, 190	
Mild solution	99, 118	
Modulus	136, 257, 281ff, 281	
Multiplication	operator	89ff, 246
	semigroup	11ff, 42ff, 65ff, 287ff
Multiplicity	73ff	
	algebraic	73ff, 209, 310
	as a pole	73
	geometric	73, 310

Negative part	235	
Norm		
	graph norm	6
	Sobolev norm	18ff
Operator		
	closable	6ff
	closed	6ff
	contractive	47ff
	densely defined	6
	differential	8ff
	dissipative	47ff
	dispersive	245ff
	elliptic	185, 190ff, 260, 305, 318
	kernel	104, 189ff, 308ff, 320, 340ff, 363, 367
	lattice	120, 243
	local	146ff, 268ff, 282, 287
	Laplace	34ff, 100, 110, 139, 168, 185, 205, 250ff, 258, 338
	multiplication	7ff, 89ff, 246, 287
	positive	120ff
	p-contractive	48ff
	p-dissipative	48ff, 128ff
	resolvent positive	127ff
	Schrödinger	179, 273, 273ff, 336
	strictly dissipative	48ff
	strictly p-dissipative	48ff
	strictly dispersive	249ff
	weakly compact	181, 211ff
Operator semigroup	1ff, 437	
	weakly compact	406ff
Order bounded	238	
Order		
	complete	234
	continuous norm	241
	interval	235
Order continuity	239, 286, 287ff	
Order unit	238	
	weak	238
Ordered		
	Banach space	234, 235
	vector space	234

Periodic		
	semigroup	79ff, 85, 313, 416
P-periodic	113ff	
Perron-Frobenius theory	163ff, 172ff, 202ff, 298ff, 379ff	
Perturbation		
	additive	43ff
	bounded	44ff, 307
	compact	215ff, 319
	multiplicative	131ff, 141
Perturbation by multiplication operators	179, 183, 189, 274ff, 279, 307	
Perturbation theorems	43ff	
Phillip's theorem	249	
Polar decomposition	418, 418	
Pole	67ff, 72ff, 76, 200ff, 305, 315ff	
	algebraically simple	73ff, 181, 185, 209ff, 216, 315ff
	of order k	73ff, 86, 174ff, 295, 302ff
	simple	73ff, 209ff, 310, 315ff
	first order	73ff, 180