

BIBLIOGRAPHY

Abraham, R.; Marsden, J.E.

- [1978] Foundations of Mechanics.
London-Amsterdam: Benjamin / Cummings 1978.

Abramovich, Y.A.

- [1983] Multiplicative representation of disjointness preserving operators.
Indag. Math. 45 (1983), 265-279.

Akemann, C.A.; Dodds, P.G.; Gamlen, J.L.B.

- [1972] Weak compactness in the dual space of a W^* -algebra.
J. Funct. Anal. 16 (1972), 446-450.

Ando, T.

- [1961] Convergent sequences of finitely additive measures.
Pacific J. Math. 11 (1961), 395-404.

Albeverio, S.; Høegh-Krohn, R.

- [1978] Frobenius theory for positive maps on von Neumann algebras.
Comm. Math. Phys. 64 (1978), 83-94.

Amann, H.

- [1976] Fixed point equations and nonlinear eigenvalue problems in ordered Banach spaces.
SIAM Rev. 18 (1976), 620-709.
[1983] Dual semigroups and second order linear elliptic boundary value problems.
Israel J. Math. 45 (1983), 225-254.

Arendt, W.

- [1982] Kato's equality and spectral decomposition for positive C_0 -groups.
Manuscripta Math. 40 (1982), 277-298.
[1983] Spectral properties of Lamperti operators.
Indiana Univ. Math. J. 32 (1983), 199-215.
[1984a] Generators of positive semigroups.
In: F. Kappel; W. Schappacher (eds.): Infinite-dimensional Systems, Retzhof 1983. Lecture Notes in Math. 1076, 1-15. Berlin-Heidelberg-New York: Springer 1984.
[1984b] Kato's inequality. A characterization of generators of positive semigroups.
Proc. Roy. Irish Acad. Sect. A 84 (1984), 155-174.
[1984c] Resolvent positive operators and integrated semigroups.
Semesterbericht Funktionalanalysis, Tübingen, Sommersemester 1984, 73-101.
[1985] Resolvent positive operators.
Universität Tübingen, Preprint 1985.

Arendt, W.; Chernoff, P.; Kato, T.

- [1982] A generalization of dissipativity and positive semigroups.
J. Operator Theory 8 (1982), 167-180.

Arendt, W.; Greiner, G.

- [1984] The spectral mapping theorem for one-parameter groups of positive operators on $C(X)$.
Semigroup Forum 30 (1984), 297-330.

Arino, O.; Kimmel, M.

- [1985] Asymptotic analysis of a cell-cycle model based on unequal division.
Preprint 1985.

Asimow, L.; Ellis, A.J.

- [1980] Convexity Theory and its Applications in Functional Analysis.
London-New York-San Francisco: Academic Press 1980.

Axmann, D.

- [1980] Struktur- und Ergodentheorie irreduzibler Operatoren auf Banachverbänden.
Dissertation, Tübingen 1980.

Baras P.; Pierre M.

- [1985] Critère d'existence de solutions positives pour des équations semi-linéaires non monotones.
Preprint. Nancy 1985.

Bart, H.

- [1977] Periodic strongly continuous semigroups.
Ann. Mat. Pura Appl. 115 (1977), 311-318.

Batty, C.J.K.

- [1978] Dissipative mappings and well-behaved derivations.
J. London Math. Soc. 18 (1978), 527-533.
[1981] Derivations on compact spaces.
Proc. London Math. Soc. 42 (1981), 299-330.

Batty, C.J.K.; Davies, E.B.

- [1982] Positive semigroups and resolvents.
J. Operator Theory 10 (1982), 357-363.

Batty, C.J.K.; Robinson, D.W.

- [1984] Positive one-parameter semigroups on ordered spaces.
Acta. Appl. Math. 2 (1984), 221-296.
[1985] The characterization of differential operators by locality: abstract derivations.
Ergodic Theory Dynamical Systems 5 (1985), 171-183.

Bauer, H.

- [1966] Harmonische Räume und ihre Potentialtheorie.
Berlin-Heidelberg-New York: Springer 1966.

Beals, R.

- [1972] On the abstract Cauchy problem.
J. Funct. Anal. 10 (1972), 281-299.

Belleni-Morante, A.

- [1979] Applied Semigroups and Evolution Equations.
Oxford: Oxford University Press 1979.

Bellmann, R.; Cooke, K.L.

- [1963] Differential-Difference Equations.
London-New York: Academic Press 1963.

Belyi, A.G.; Semenov, Y.A.

- [1975] Kato's inequality and semigroup product-formulas.
Functional Anal. Appl. 9 (1975), 320-321.

Benchimol, C.D.

- [1978a] A note on weak stabilizability of contraction semigroups.
SIAM J. Control Optim. 16 (1978), 373-379.
[1978b] Feedback stabilizability in Hilbert spaces.
Appl. Math. Optim. 4 (1978), 223-248.

Bénilan, P.; Picard, C.

- [1979] Quelques aspects non linéaires du principe du maximum.
In: Séminaire de Théorie du Potentiel. Lecture Notes in Math. 713. Springer 1979.

Berg, C.; Forst, G.

- [1975] Potential Theory on Locally Compact Abelian Groups.
Berlin-Heidelberg-New York: Springer 1975.

Berger, C.A.; Coburn, L.A.

- [1970] One-parameter semigroups of isometries.
Bull. Amer. Math. Soc. 76 (1970), 1125-1129.

Beurling, A.

- [1970] On analytic extensions of semigroups of operators.
J. Funct. Anal. 6 (1970), 387-400.

Beurling, A.; Deny, J.

- [1948] Espaces de Dirichlet I: Le cas élémentaire.
Acta Math. 99 (1948), 203-224.

Di Blasio, G.; Kunisch, E.; Sinestrari, E.

- [1983] The solution operator for a partial differential equation with delay.
Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. 74 (1983), 228-233.
- [1984] Stability for abstract linear functional equations.
To appear in: Israel J. Math.

Bony, J.-M.; Courrège, P.; Priouret, P.

- [1968] Semi-groups de Feller sur une variété à bord compact et problèmes aux limites intégrro-différentiels du second ordre donnant lieu au principe du maximum.
Ann. Inst. Fourier (Grenoble) 18 (1968), 369-521.

Bourbaki, N.

- [1955] Eléments des Mathématiques, Intégration, Chapitre 5: Intégration des Mesures.
Paris: Hermann 1955.

Bourgain, J.

- [1980] Propriétés de rèlevement et projections dans les espace L^1/H^1_0 et H^∞ .
C. R. Acad. Sci. Paris Sér. A-Math. 291 (1980), 607-609.
- [1985] Some new properties of the Banach spaces L^1/H^1_0 and H^∞ (Part II).
Preprint 1985.

Boyadzhiev, H.N.

- [1984] Characterization of the generators of C_0 semigroups which leave a convex set invariant.
Commen. Math. Univ. Carolin. 25 (1984), 159-170.

Bratteli, O.; Digernes, T.; Robinson, D.W.

- [1983] Positive semigroups on ordered Banach spaces.
J. Operator Theory 9 (1983), 371-400.

Bratteli, O.; Jørgensen, P.E.T.

- [1984] Positive Semigroups of Operators and Applications.
Special issue of Acta Appl. Math. 2 (1984), Dordrecht / Boston: Reidel 1984.

Bratteli, O.; Kishimoto, A.; Robinson, D.W.

- [1980] Positivity and monotonicity properties of C_0 -semigroups, I.
Comm. Math. Phys. 75 (1980), 67-84.

Bratteli, O.; Robinson, D.W.

- [1975] Unbounded derivations of C^* -algebras.
Comm. Math. Phys. 42 (1975), 253-268.
- [1979] Operator Algebras and Quantum Statistical Mechanics I.
New York-Heidelberg-Berlin: Springer 1979; II, ibid. 1981.
- [1981] Positive C_0 -semigroups on C^* -algebras.
Math. Scand. 49 (1981), 259-274.

Calvert, B.D.

- [1970] Nonlinear evolution equations in Banach lattice.
Bull. Amer. Math. Soc. 76 (1970), 845-850.
- [1971a] Nonlinear equations of evolution.
Pacific J. Math. 39 (1971), 293-350.
- [1971b] Semigroups on an ordered Banach space.
J. Math. Soc. Japan 23 (1971), 311-319.
- [1972] On T-accretive operators.
Ann. Mat. Pura Appl. 94 (1972), 291-314.

Calvert, B.D.; Picard, C.

- [1975] Opérateurs accréatifs et Φ -accréatifs dans un espace de Banach.
Hiroshima Math. J. 5 (1975), 363-370.

van Casteren, J.

- [1984] Invariant subsets of strongly continuous semigroups.
Integral Equations Operator Theory 7 (1984), 884-892.
- [1985] Generators of Strongly Continuous Semigroups.
Boston-London-Melbourne: Pitman 1985.

Chicone, C.; Swanson, R.C.

- [1981] Spectral theory for linearizations of dynamical systems.
J. Differential Equations. 40 (1981), 155-167.

Choi, M.-D.

- [1974] A Schwarz inequality for positive linear maps on C*-algebras.
Illinois J. Math. 18 (1974), 565-574.

Choquet, G.; Foias, C.

- [1975] Solution d'un problème sur les itérés d'un opérateur positif sur $C(K)$ et propriétés des moyennes associées.
Ann. Inst. Fourier (Grenoble) 25 (1975), 109-125.

Coffman, C.V.; Grover, C.L.

- [1980] Obtuse cones in Hilbert spaces and application to partial differential equations.
J. Funct. Anal. 35 (1980), 369-396.

Collatz, P.

- [1942] Einschließungssatz für die charakteristischen Zahlen von Matrizen.
Math. Z. 48 (1942), 221-226.

Combes, F.; Delaroche, C.

- [1978] Représentations des groupes localement compacts et applications aux algèbres d'opérateurs.
Astérisque (Séminaire d'Orléans) 55 (1978).

Cooke, K.L.; Ferreira, J.M.

- [1983] Stability conditions for linear retarded differential equations.
J. Math. Anal. Appl. 96 (1983), 480-504.

Coulhon, T.

- [1984] Suites d'opérateurs sur un espace $C(K)$ de Grothendieck.
C. R. Acad. Sci. Paris Sér. I-Math. 298 (1984), 13-15.

Cornfeld, I.P.; Fomin, S.V.; Sinai, Ya.G.

- [1982] Ergodic Theory.
Berlin-Heidelberg-New York: Springer 1982.

Crandall, M.G.; Tartar, L.

- [1980] Some relations between nonexpansive and order preserving mappings.
Proc. Amer. Math. Soc. 78 (1980), 385-390.

Datko, R.

- [1970] Extending a theorem of A.M. Liapunov to Hilbert space.
J. Math. Anal. Appl. 32 (1970), 610-616.
[1972] Uniform asymptotic stability of evolutionary processes in a Banach space.
SIAM J. Math. Anal. 3 (1972), 428-445.
[1983] An example of an unstable neutral differential equation.
Internat. J. Control 38 (1983), 263-267.

Davies, E.B.

- [1972] Some contraction semigroups in quantum probability.
Z. Wahrsch. Verw. Gebiete 23 (1972), 261-273.
[1976] Quantum Theory of Open Systems.
London-New York-San Francisco: Academic Press 1976.
[1979] Generators of dynamical semigroups.
J. Funct. Anal. 34 (1979), 421-431.
[1980] One-parameter Semigroups.
London-New York-San Francisco: Academic Press 1980.
[1982] The harmonic functions of mean ergodic semigroups.
Math. Z. 181 (1982), 543-552.
[1986] Spectral properties of some second order elliptic operators on L^p -spaces.
In: R. Nagel; U. Schlotterbeck; M.P.H. Wolff (eds.): Aspects of Positivity
in Functional Analysis. Amsterdam: North Holland 1986.

Deimling, K.

- [1977] Ordinary Differential Equations in Banach Spaces.
Berlin-Heidelberg-New York: Springer 1977.

DeLeeuw, K.; Glicksberg, I.

- [1961] Applications of almost periodic compactifications.
Acta Math. 105 (1961), 63-97.

Derndinger, R.

- [1980] Über das Spektrum positiver Generatoren.
Math. Z. 172 (1980), 281-293.

- [1984] Betragshalbgruppen normstetiger Operatorhalbgruppen.
Arch. Math. 42 (1984), 371-375.
- Derndinger, R.; Nagel, R.
- [1979] Der Generator starkstetiger Verbandshalbgruppen auf $C(X)$ und dessen Spektrum.
Math. Ann. 245 (1979), 159-177.
- Desch, W.; Schappacher, W.
- [1983] Spectral properties of finite-dimensional perturbed linear semigroups.
Universität Graz, Preprint 1983.
- [1984] On relatively bounded perturbations of linear C -semigroups.
Ann. Scuola Norm. Sup. Pisa 11 (1984), 327-341.^o
- Diekmann, O.; Heijmans, H.J.A.M.; Thieme, H.R.
- [1984] On the stability of the cell size distribution.
J. Math. Biol. 19 (1984), 227-248.
- Dieudonné, J.
- [1971] Eléments d'Analyse (Tome IV).
Paris: Gauthier-Villars 1971.
- Doetsch, G.
- [1950] Handbuch der Laplace Transformation, Band I,
Basel: Birkhäuser 1950.
- Dorroh, J.R.
- [1966] Contraction semi-groups in a function space.
Pacific J. Math. 19 (1966), 35-38.
- Dunford, N.; Schwartz, J.T.
- [1958] Linear Operators, Part I: General Theory.
New York: Wiley 1958.
- Dynkin, E.B.
- [1965] Markov Processes I , II.
Berlin-Göttingen-Heidelberg: Springer 1965.
- Dyson, J.; Villella-Bressan R.
- [1979] Semigroups of translations associated with functional and functional differential equations
Proc. Roy. Soc. Edinburgh Sect. A 82 (1979), 171-188.
- Eberlein, W.F.
- [1948] Abstract ergodic theorems and weak almost periodic functions.
Trans. Amer. Math. Soc. 67 (1948), 217-240.

Elliot, G.

- [1972] Convergence of automorphisms on certain C^* -algebras.
J. Funct. Anal. 11 (1972), 204-206.

Evans, D.E.

- [1976] On the spectrum of a one-parameter strongly continuous representation.
Math. Scand. 39 (1976), 80-82.
[1977] Irreducible quantum dynamical semigroups.
Comm. Math. Phys. 54 (1977), 293-297.
[1984] Quantum dynamical semigroups, symmetry groups, and locality.
Acta. Appl. Math 2 (1984), 333-352.

Evans, D.E.; Hanche-Olsen, H.

- [1979] The generators of positive semigroups.
J. Funct. Anal. 32 (1979), 207-212.

Fattorini, H.O.

- [1969a] Ordinary differential equations in linear topological spaces, I.
J. Differential Equations 5 (1969), 72-105.
[1969b] Ordinary differential equations in linear topological spaces, II.
J. Differential Equations 6 (1969), 50-70.
[1983] The Cauchy Problem.
Reading (Mass.): Addison-Wesley 1983.

Feller, W.

- [1952] The parabolic differential equation and the associated semigroups of transformations.
Ann. of Math. 55 (1952), 468-519.
[1953a] On the generation of unbounded semigroups of bounded linear operators.
Ann. of Math. 58 (1953), 166-174.
[1953b] On positivity preserving semigroups of transformations on $C[r_1, r_2]$.
Ann. Soc. Math. Polon. 25 (1953), 85-94.
[1954a] The general diffusion operator of positivity preserving semigroups in one dimension.
Ann. of Math. 60 (1954), 417-436.
[1954b] Diffusion processes in one dimension.
Trans. Amer. Math. Soc. 77 (1954), 1-31.
[1955] On second order differential operators.
Ann. of Math. 61 (1955), 90-105.
[1956] Boundaries induced by non-negative matrices.
Trans. Amer. Math. Soc. 83 (1956), 19-54.
[1957] On boundaries defined by stochastic matrices.
Applied probability. Proceedings of Symposia in Applied Mathematics, Vol. VII, 35-40, New York: McGraw Hill 1957.
[1959] Differential operators with the positive maximum property.
Illinois J. Math. 3 (1959), 182-186.

Fisher, S.D.

- [1983] Function Theory on Planar Domains.
New York: Wiley 1983.

Foiaş, C.

- [1973] Sur une question de M. Reghiş.
An. Univ. Timişoara Ser. Ştiinţ. Mat. 11 (1973), 111-114.

Frigerio, A.; Verri, M.

- [1982] Long-time asymptotic properties of dynamical semigroups on W^* -algebras.
Math. Z. 180 (1982), 275-286.

Frobenius, G.

- [1909] Über Matrizen aus positiven Elementen.
Sitzungsber. Preuß. Akad. Wiss., Physikal.-Math. Kl. (1908), 471-476; *ibid.*
(1909), 514-518.

Fukushima, M.

- [1982] Dirichlet Forms and Markov Processes.
London: North Holland 1980.

Gearhart, L.

- [1978] Spectral theory for contraction semigroups on Hilbert spaces.
Trans. Amer. Math. Soc. 236 (1978), 385-394.

Gilbarg, D.; Trudinger, N.S.

- [1977] Elliptic Partial Differential Equations of Second Order.
Berlin: Springer 1977.

Goldstein, J.A.

- [1981] Some developments in semigroups since Hille Phillips.
Integral Equations Operator Theory 4 (1981), 350-365.
[1985a] Semigroups of Operators and Applications.
Oxford University Press 1985.
[1985b] A (more-or-less) complete bibliography of semigroups of operators through
1984. Preprints and Lecture Notes in Mathematics.
Tulane University 1985.
[1986] Asymptotics for bounded semigroups in Hilbert spaces.
In: R. Nagel; U. Schlotterbeck; M.P.H. Wolff (eds.): Aspects of Positivity
in Functional Analysis. Amsterdam: North Holland 1986.

Greiner, G.

- [1981] Zur Perron-Frobenius Theorie stark stetiger Halbgruppen.
Math. Z. 177 (1981), 401-423.
[1982] Spektrum und Asymptotik stark stetiger Halbgruppen positiver Operatoren.
Sitzungsber. Heidelb. Akad. Wiss., Math.-Naturwiss. Kl. (1982) 55-80.

- [1984a] A typical Perron-Frobenius theorem with applications to an age-dependent population equation.
In: F. Kappel; W. Schappacher (eds.): Infinite-dimensional Systems, Retzhof 1983. Lecture Notes in Math. 1076, 86-100. Berlin-Heidelberg-New York: Springer 1984.
- [1984b] Spectral properties and asymptotic behavior of the linear transport equation.
Math. Z. 185 (1984), 167-177.
- [1984c] A spectral decomposition of strongly continuous groups of positive operators.
Quart. J. Oxford (2) 35 (1984), 37-47.
- [1984d] An irreducibility criterion for the linear transport equation.
Semesterbericht Funktionalanalysis, Tübingen, Sommersemester 1984, 1-8.
- [1985] Some applications of Fejér's theorem to one-parameter semigroups.
Preprint 1985.
- [1986] Perturbing the boundary conditions of a generator.
To appear in: Houston J. Math.

Greiner, G.; Nagel, R.

- [1982] La loi "zero ou deux" et ses conséquences pour le comportement asymptotique des opérateurs positifs.
J. Math. Pures Appl. 9 (1982), 261-273.
- [1983] On the stability of strongly continuous semigroups of positive operators on $L^2(\mu)$.
Ann. Scuola Norm. Sup. Pisa 10 (1983), 257-262.

Greiner, G.; Voigt, J.; Wolff, M.P.H.

- [1981] On the spectral bound of the generator of semigroups of positive operators.
J. Operator Theory 5 (1981), 245-256.

Groh, U.

- [1981] The peripheral point spectrum of Schwarz operators on C^* -algebras
Math. Z. 176 (1981), 311-318.
- [1982a] Some observations on the spectra of positive operators on finite dimensional C^* -algebras.
Linear Algebra Appl. 42 (1982), 213-222.
- [1982b] Asymptotic behavior of dynamical systems on W^* -algebras.
Semesterbericht Funktionalanalysis, Tübingen, Sommersemester 1982, 15-25.
- [1984a] Uniformly ergodic maps on C^* -algebras.
Israel J. Math. 47 (1984), 227-235.
- [1984b] Uniform ergodic theorems for identity preserving Schwarz maps on W^* -algebras.
J. Operator Theory 11 (1984), 395-404.
- [1984c] Spectrum and asymptotic behaviour of completely positive maps on $B(H)$.
Math. Japonica 29 (1984), 395-402.

Groh, U.; Kümmerer, B.

- [1982] Bibounded operators on W^* -algebras.
Math. Scand. 50 (1982), 269-285.

Groh, U.; Neubrander, F.

- [1981] Stabilität starkstetiger positiver Operatorhalbgruppen auf C^* -Algebren.
Math. Ann. 256 (1981), 129-173.

Grothendieck, A.

- [1953] Sur les applications linéaires faiblement compactes d'espaces du type $C(K)$.
Canadian J. Math. 5 (1953), 129-173.

Gustafson, K.; Lumer, G.

- [1972] Multiplicative perturbation of semigroup generators.
Pacific J. Math. 41 (1972), 731-742.

Gyllenberg, M.; Heijmans, H.J.A.M.

- [1985] An abstract delay equation modelling size dependent cell growth and division.
Preprint 1985.

Hadeler, K.-P.

- [1978] Delay-equations in biology.
In: H.-O. Peitgen; H.-O. Walther (eds.) Functional Differential Equations and Approximation of Fixed Points, Bonn 1978. Lecture Notes in Math. 730, 136-156. Berlin-Heidelberg-New York 1978.

Hale, J.

- [1977] Theory of Functional Differential Equations.
New York-Heidelberg-Berlin: Springer 1977.

Hamel, G.

- [1905] Eine Basis aller Zahlen und die unstetigen Lösungen der Funktionalgleichung:
 $f(x + y) = f(x) + f(y)$.
Math. Ann. 60 (1905), 459-462.

Hasegawa, M.

- [1966] On contraction semigroups and (di)-operators.
J. Math. Soc. Japan 18 (1966), 290-302.

Heijmans, H.J.A.M.

- [1985a] Structured populations, linear semigroups and positivity.
To appear in: Math. Z.
[1985b] An eigenvalue problem related to cell growth.
J. Math. Anal. Appl. 111 (1985), 253-280.
[1986] The dynamical behavior of the age-size distribution of a cell population.
In: J.A.J. Metz; O. Diekmann (eds.) Dynamics of Physiologically Structured Population. Springer Lecture Notes Biomathematics (to appear).

Hempel, R.; Voigt, J.

- [1985] The spectrum of a Schrödinger operator in $L_p(\mathbb{R}^V)$ is p -independent.
Preprint. München 1985.

Herbst, I.W.

- [1982] Contraction semigroups and the spectrum of $A_1 \theta I + I \theta A_2$.
J. Operator Theory 7 (1982), 61-78.
- [1983] The spectrum of Hilbert space semigroups.
J. Operator Theory 10 (1983), 87-94.

Herbst, I.W.; Sloan, A.D.

- [1978] Perturbation of translation invariant positivity preserving semigroups on $L^\infty(\mathbb{R}^N)$.
Trans. Amer. Math. Soc. 236 (1978), 325-360.

Hess, H.; Kato, T.

- [1980] On some linear and nonlinear eigenvalue problems with an infinite weight function.
Comm. Partielle Differential Equations 5 (1980), 999-1030.

Hess, H.; Schrader, R.; Uhlenbrock, D.A.

- [1977] Domination of semigroups and generalization of Kato's inequality.
Duke Math. J. 44 (1977), 893-904.

Hewitt, E.; Ross, K.A.

- [1963] Abstract Harmonic Analysis I.
Berlin-Heidelberg-New York: Springer 1963.

Hiai, F.

- [1978] Weakly mixing properties of semigroups of linear operators.
Kodai Math. J. 1 (1978), 376-393.

Hille, E.

- [1948] Functional Analysis and Semigroups.
Amer. Math. Soc. Coll. Publ. 31, Providence (R.I.) 1948.
- [1952] Une généralisation du problème de Cauchy.
Ann. Inst. Fourier (Grenoble) 4 (1952), 31-48.

Hille, E.; Phillips, R.S.

- [1957] Functional Analysis and Semigroups.
Amer. Math. Soc. Coll. Publ. 31, Providence (R.I.) 1957.

Hirsch, M.W.; Smale, S.

- [1974] Differential Equations, Dynamical Systems and Linear Algebra.
New York: Academic Press 1974.

Howland, J.S.

- [1984] On a theorem of Gearhart.
Integral Equations Operator Theory 7 (1984), 138-142.

D'Jacenko, S.V.

- [1976] Semigroups of almost negative type and their applications.
Soviet Math. Dokl. 17 (1976), 1189-1193.

Jacobs, K.

- [1972] Gleichverteilung mod 1 .
Selecta Math. IV, 57-93, Berlin-Heidelberg-New York: Springer 1972.

Jameson, G.J.O.

- [1974] Topology and Normed Spaces.
London: Chapman / Hall 1974.

Jørgensen, P.T.

- [1980] Monotone convergence of operators semigroups and the dynamics of infinite particle systems.
Aarhus Universitet, Preprint 1980.

Junghenn, H.D.

- [1971] Almost periodic compactifications and applications to one parameter semigroups.
Doctoral Dissertation, The George Washington University 1971.

Kadison, R.V.

- [1965] Transformations of states in operator theory and dynamics.
Topology 3 (1965), 177-198.

Kallman, R.R.

- [1969] Unitary groups and automorphisms of operator algebras.
Amer. J. Math. 91 (1969), 785-806.

Kamke, E.

- [1932] Zur Theorie der Systeme gewöhnlicher Differentialgleichungen II.
Acta Math. 58 (1932), 57-85.

Kaper, H.G.; Lekkerkerker, C.G.; Hejtmanek, J.

- [1983a] Spectral Methods in Linear Transport Theory.
Basel: Birkhäuser 1982.
[1983b] Recent progress on the reactor problem of linear transport theory.
Argonne National Laboratory, Preprint 1983.

Karlin, S.

- [1959] Positive operators.
J. Math. Mech. 8 (1959), 907-937.

Kato, T.

- [1966] Perturbation Theory for Linear Operators 1966.
2nd printing: Berlin-Heidelberg-New York: Springer 1976.
- [1973] Schrödinger operators with singular potentials.
Israel J. Math. 13 (1973), 135-148.
- [1982] Superconvexity of the spectral radius, and convexity of the spectral bound and the type.
Math. Z. 180 (1982), 265-273.
- [1986] L^p -Theory of Schrödinger operators with a singular potential.
In: R. Nagel; U. Schlotterbeck; M.P.H. Wolff (eds.): Aspects of Positivity in Functional Analysis. Amsterdam: North Holland 1986.

Katznelson, Y.; Tzafriri, L.

- [1984] On power bounded operators.
Hebrew University, Jerusalem, Preprint 1984.

Kerscher, W.

- [1986] Retardierte Cauchy Probleme: Ordnungseigenschaften und Stabilität unabhängig von der Verzögerung.
Dissertation, Universität Tübingen 1986.

Kerscher, W.; Nagel, R.

- [1984] Asymptotic behavior of one-parameter semigroups of positive operators.
Acta Appl. Math. 2 (1984), 297-309.

Kipnis, C.

- [1974] Majoration des semi-groupes de contractions de L^1 et applications.
Ann. Inst. H. Poincaré (Sect. B) 10 (1974), 369-384.

Kishimoto, A.; Robinson, D.W.

- [1980] Positivity and monotonicity properties of C_0 -semigroups, II.
Comm. Math. Phys. 75 (1980), 85-101.
- [1981] Subordinate semigroups and order properties.
J. Austral. Math. Soc. Ser. A 31 (1981), 59-76.

Klein, A.; Landau, L.J.

- [1975] Singular perturbations of positivity preserving semigroups via path space techniques.
J. Funct. Anal. 20 (1975), 44-82.

Klein, I.

- [1984] Zur Spektraltheorie positiver Halbgruppen auf geordneten Banachräumen.
Dissertation, Universität Tübingen 1984.

Komatsu, H.

- [1969] Fractional powers of operators III, Negative powers.
J. Math. Soc. Japan 21 (1969), 205-228.

Konishi, Y.

- [1971] Nonlinear semigroups in Banach lattices.
Proc. Japan Acad. Ser. A Math. Sci. 47 (1971), 24-28.

Krasnosel'skii, M.A.

- [1964] Positive Solutions of Operator Equations.
Groningen: Noordhoff 1964.

Krein, S.G.

- [1971] Linear Differential Equations in Banach Spaces.
Amer. Math. Soc. Transl. 29, Providence (R.I.) 1971.

Krein, S.G.; Khazan, M.I.

- [1985] Differential equations in a Banach space.
J. Soviet Math. 30 (1985), 2154-2239.

Kreiss, H.O.

- [1958] Über sachgemässe Cauchyprobleme für Systeme von linearen partiellen Differentialgleichungen.
TRITA-NA, Roy. Inst. Technol., Stockholm 127 (1958).
[1959] Über Matrizen die beschränkte Halbgruppen erzeugen.
Math. Scand. 7 (1959), 71-80.

Krengel, U.

- [1985] Ergodic Theorems.
Berlin, New York: de Gruyter 1985.

Kubokawa, Y.

- [1975] Ergodic theorems for contraction semigroups.
J. Math. Soc. Japan 27 (1975), 184-193.

Kümmerer, B.; Nagel, R.

- [1979] Mean ergodic semigroups on W^* -algebras.
Acta Sci. Math. 41 (1979), 151-159.

Kuhn, K.

- [1984] Elliptische Differentialoperatoren als Generatoren auf $C(\Omega)$.
Semesterbericht Funktionalanalysis, Tübingen, Wintersemester 1984/1985,
125-142.

Kunisch, K.; Schappacher, W.

- [1983] Necessary conditions for partial differential equations with delay to generate C_0 -semigroups.
J. Differential Equation 50 (1983), 49-79.

Kunita, H.

- [1969] Sub-Markov semi-groups in Banach lattices.
Proc. of the Conference on Funct. Anal. and Related Topics, 332-343. Tokyo Press 1969.

Kurose, H.

- [1981] An example of a non quasi well-behaved derivation on $C(I)$.
J. Funct. Anal. 43 (1981), 193-201.
- [1982] On a closed derivation in $C(I)$.
Mem. Fac. Sci. Kyushu Univ. Ser. A Math. 36 (1982), 193-198.
- [1983] Closed derivations in $C(I)$.
Tôhoku Math. J. 35 (1983), 341-347.

Lamperti, J.

- [1977] Stochastic Processes.
Berlin-Heidelberg-New York: Springer 1977.

de Laubenfels, R.

- [1984] Well behaved derivation on $C[0,1]$.
Pacific J. Math. 115 (1984), 73-80.

Leader, S.

- [1954] On the infinitesimal generators of a semigroups of positive transformations with local character condition.
Proc. Amer. Math. Soc. 5 (1954), 401-406.

Lin, M.

- [1974] On the uniform ergodic theorem II.
Proc. Amer. Math. Soc. 46 (1974), 217-225.
- [1975] Quascompactness and uniform ergodicity of Markov operators.
Ann. Inst. H. Poincaré (Sect. B) 11 (1975), 345-354.

Lin, M.; Montgomery, J.; Sine R.

- [1977] Change of velocity and ergodicity in flows and in Markov semi-groups.
Z. Wahrsch. Verw. Gebiete 39 (1977), 197-211.

Lindblad, G.

- [1976] On the generators of quantum dynamical semigroups.
Comm. Math. Phys. 48 (1976), 119-130.

Lindenstrauss, J.; Tzafriri, L.

- [1979] Classical Banach Spaces II, Function Spaces.
Berlin-Heidelberg-New York: Springer 1979.

Lotz, H.P.

- [1981] Uniform ergodic theorems for Markov operators on $C(X)$.
Math. Z. 178 (1981), 145-156.
- [1982] Uniform convergence of operators on L^∞ .
Semesterbericht Funktionalanalysis, Tübingen, Wintersemester 1982/1983.
- [1984] Tauberian theorems for operators on L^∞ and similar spaces.
In: K.D. Bierstedt; B. Fuchssteiner (eds.) Functional Analysis, Surveys and Recent Results III. Amsterdam: North Holland 1984.

- [1985] Uniform convergence of operators on L^∞ and similar spaces.
Math. Z. 190 (1985), 207-220.
- [1986] Positive linear operators on L^p and the Doeblin condition.
In: R. Nagel; U. Schlotterbeck; M.P.H. Wolff (eds.): Aspects of Positivity
in Functional Analysis. Amsterdam: North Holland 1986.

Lumer, G.

- [1974a] Perturbations de générateurs infinitésimaux du type "changement de temps".
Ann. Inst. Fourier (Grenoble) 23 (1974), 271-279.
- [1974b] Problème de Cauchy pour opérateurs locaux et "changement de temps".
Ann. Inst. Fourier (Grenoble) 23 (1974), 409-466.

Lumer, G.; Phillips, R.S.

- [1961] Dissipative operators in a Banach space.
Pacific J. Math. 11 (1961), 679-698.

Luxemburg, W.A.J.

- [1979] Some Aspects of the Theory of Riesz Spaces.
The University of Arkansas Lecture Notes in Mathematics 4,
Fayetteville 1979.

Majewski, A.; Robinson, D.W.

- [1983] Strictly positive and strongly positive semigroups.
J. Austral. Math. Soc. Ser. A 34 (1983), 36-48.

Miller, J.; Strang, G.

- [1966] Matrix theorems for partial differential and difference equations.
Math. Scand. 18 (1966), 113-133.

Miller, R.K.

- [1974] Linear Volterra integro-differential equations as semigroups.
Funkcial. Ekvac. 17 (1974), 39-55.

Mil'stein, G.N.

- [1975] Exponential stability of positive semigroups in a linear topological space
I, II.
Soviet. Math. 19 (1975), 35-42, 51-61.

Miyadera, I.

- [1952] Generation of a strongly continuous semigroup of operators.
Tôhoku Math. J. 4 (1952), 109-114.

Miyajima, S.

- [1986] Generators of positive C_0 -semigroups.
In: R. Nagel; U. Schlotterbeck; M.P.H. Wolff (eds.): Aspects of Positivity
in Functional Analysis. Amsterdam: North Holland 1986.

Miyajima, S.; Okazawa, N.

- [1984] Generators of positive C_0 -semigroups on Banach lattices.
Preprint 1984.

Montgomery, D.; Zippin, L.

- [1955] Topological Transformation Groups.
New York: Interscience Publishers 1955.

Moreau, J.J.

- [1966] Fonctionelles convexes.
Séminaire sur les équations aux dérivées partielles. Collège de France
1966-67.

Nagel, R.

- [1973] Mittelergodische Halbgruppen linearer Operatoren.
Ann. Inst. Fourier (Grenoble) 23 (1973), 75-87.
[1983] Sobolev Spaces and Semigroups.
Semesterbericht Funktionalanalysis, Tübingen, Sommersemester 1984, 1-19.
[1984] What can positivity do for stability?
In: K.D. Bierstedt; B. Fuchssteiner (eds.): Functional Analysis, Surveys and
Recent Results III. Amsterdam: North Holland 1984.
[1985] Well-posedness and positivity for systems of linear evolution equations.
Conferenze del Seminario di Matematica dell'Università di Bari 203 (1985),
1-29.

Nagel, R.; Derndinger, R.; Palm, G.

- [1982] Ergodic Theory in the Functional Analytic Perspective.
Tübingen 1982.

Nagel, R.; Uhlig, H.

- [1981] An abstract Kato inequality for generators of positive semigroups on Banach
lattices.
J. Operator Theory 6 (1981), 113-123.

Nakano, H.

- [1950] Modern Spectral Theory.
Tokyo Mathematical Book Series. Vol. II. Maruzen Co.: Tokyo 1950.

Neubrandner, F.

- [1984a] Well-posedness of abstract Cauchy problems.
Semigroup Forum 29 (1984), 75-85.
[1984b] Well-posedness of higher order abstract Cauchy problems.
Dissertation, Universität Tübingen 1984.
[1985a] Laplace transform and asymptotic behavior of strongly continuous semigroups.
To appear in: Houston J. Math.

- [1985b] Asymptotic behavior of solutions of inhomogeneous abstract Cauchy problems.
In: Proc. Conf. Physical Math. and Nonlinear Part. Differential Equations,
Morgantown 1983, 157-73. Marcel Dekker 1985.
- [1986] Well-posedness of higher order abstract Cauchy problems.
To appear in: Trans. Amer. Math. Soc.

Nussbaum, R.D.

- [1984] Positive operators and elliptic eigenvalue problems.
Math. Z. 186 (1984), 247-264.

Okazawa, N.

- [1984] An L^p -theory for Schrödinger operators with nonnegative potentials.
J. Math. Soc. Japan 36 (1984), 675-688.

Olesen, D.; Pedersen, G.K. Takesaki, M.

- [1980] Ergodic actions of compact Abelian groups.
J. Operator Theory 3 (1980), 237-269.

Oseledets, V.I.

- [1984] Completely positive linear maps, non Hamiltonian evolution and quantum
stochastic processes.
J. Soviet Math. 25 (1984), 1529-1557.

de Pagter, B.

- [1984] A note on disjointness preserving operators.
Proc. Amer. Math. Soc. 90 (1984), 543-550.
- [1986] Irreducible compact operators.
To appear in: Math. Z.

Pazy, A.

- [1968] On the differentiability and compactness of linear operators.
J. Math. Mech. 17 (1968), 1131-1142.
- [1983] Semigroups of Linear Operators and Applications to Partial Differential
Equations.
Berlin- Heidelberg-New York-Tokyo: Springer 1983

Pedersen, G.K.

- [1979] C^* -Algebras and their Automorphism Groups.
London, New York, San Francisco: Academic Press 1979.

Peetre, J.

- [1959] Une caractérisation abstraite des opérateurs différentiels.
Math. Scand. 7 (1959), 211-218; et: Rectification à l'article précédent.
Math. Scand. 8 (1960), 116-120.

Perron, O.

- [1907] Zur Theorie der Matrices.
Math. Ann. 64 (1907), 248-263.

Phillips, R.S.

- [1954] A note on the abstract Cauchy problem.
Proc. Nat. Acad. Sci. U.S.A. 40 (1954), 244-248.
[1962] Semigroups of positive contraction operators.
Czechoslovak Math. J. 12 (1962), 294-313.
[1974] Perturbation theory for semi-groups of linear operators.
Trans. Amer. Math. Soc. 74 (1974), 343-369.

Picard, C.

- [1972] Opérateurs ϕ -accretifs et génération des semi-groupes non linéaires.
C. R. Acad. Sci. Paris Sér. I-Math. 275 (1972), 639-641.

Pietsch, A.

- [1978] Operator Ideals.
Berlin: VEB Deutscher Verlag der Wissenschaften 1978.

Plant, A.T.

- [1977] Nonlinear semigroups of linear operators and applications in Banach spaces.
J. Math. Anal. Appl. 60 (1977), 67-74.

Protter, M.H.; Weinberger, H.F.

- [1967] Maximum Principles in Differential Equations.
New York-Berlin-Heidelberg: Springer 1984.

Prüß, J.

- [1981] Equilibrium solutions of age-specific population dynamics of several species.
J. Math. Biol. 11 (1981), 65-84.
[1984] On the spectrum of C^0 -semigroups.
Trans. Amer. Math. Soc. 284 (1984), 847-857.

Rao, A.S.; Hengartner, W.

- [1974] On the existence of a unique almost periodic solution of an abstract differential equation.
J. London Math. Soc. 8 (1974), 577-581.

Reed, M.; Simon, B.

- [1975] Methods of Modern Mathematical Physics II. Fourier Analysis, Self-Adjointness.
New York: Academic Press 1975.
[1978] Methods of Modern Mathematical Physics IV. Analysis of Operators.
New York: Academic Press 1978.
[1979] Methods of Modern Mathematical Physics III. Scattering Theory.
New York: Academic Press 1979.

Reich, S.

- [1981] A characterization of nonlinear ϕ -accretive operators.
Manuscripta Math. 36 (1981), 163-178.

Robinson, D.W.

- [1977] The approximation of flows.
J. Funct. Anal. 24 (1977), 280-290.
[1982] Strongly positive semigroups and faithful invariant states.
Comm. Math. Phys. 85 (1982), 129-142.
[1983] Continuous semigroups on ordered Banach spaces.
J. Funct. Anal. 51 (1983), 268-284.
[1984] On positive semigroups.
Publ. Res. Inst. Math. Sci. 20 (1984), 213-224.
[1985] Differential operators on C^* -algebras.
Preprint. Canberra 1985.

Robinson, D.W.; Yamamuro, S.

- [1983] The canonical half-norm, dual half-norms, and monotonic norms.
Tôhoku Math. J. 35 (1983), 375-386.
[1984] Hereditary cones, order ideals and half-norms.
Pacific J. Math. 110 (1984), 335-343.

Roth, J.P.

- [1976] Opérateurs dissipatifs et semigroupes dans les espaces de fonctions continues.
Ann. Inst. Fourier (Grenoble) 26 (1976), 1-97.
[1978] Les opérateurs elliptiques comme générateurs infinitésimaux de semigroups de Feller.
In: F.Hirsch; G.Mokobodzki (eds.): Séminaire de Théorie du Potential, Paris No.3 . Lecture Notes in Math. 681, 234-251. Berlin-Heidelberg-New York: Springer 1978.

Sacker, R.J.; Sell, G.R.

- [1978] A spectral theory for linear differential systems.
J. Differential Equations 27 (1978), 320-358.

Sakai, S.

- [1971] C^* -Algebras and W^* -Algebras.
Berlin-Heidelberg-New York: Springer 1971.

Sato, K.I.

- [1968] On the generators of non-negative contraction semigroups in Banach lattices.
J. Math. Soc. Japan 20 (1968), 423-436.
[1970a] On dispersive operators in Banach lattices.
Pacific J. Math. 33 (1970), 429-443.
[1970b] Positive pseudo-resolvents in Banach lattices.
J. Fac. Sci. Univ. Tokyo Sect. I A Math. 17 (1970), 305-313.

Sawashima, I.

- [1964] On spectral properties of some positive operators.
Natur. Sci. Rep. Ochanomizu Univ. 15 (1964), 53-64.

Scarpellini, B.

- [1974] On the spectra of certain semigroups.
Math. Ann. 211 (1974), 323-336.

Schaefer, H.H.

- [1966] Topological Vector Spaces 1966.
4th printing: New York-Heidelberg-Berlin: Springer 1980.
[1968] Invariant ideals of positive operators in $C(X)$, II.
Illinois J. Math. 12 (1968), 525-538.
[1974] Banach Lattices and Positive Operators.
New-York Heidelberg-Berlin: Springer 1974.
[1980] Ordnungsstrukturen in der Operatorentheorie.
Jahresber. Deutsch. Math.-Verein. 82 (1980), 33-50.
[1982] Some recent results on positive groups and semi-groups.
In: C.R. Huijsmans; M.A. Kaashoek; W.A.J. Luxemburg; W.K. Vietsch (eds.):
From A to Z, Proc. Symp. in Honour of A.C. Zaanen, Leiden 1982. Mathematical
Centre Tracts 149, 69-79, Amsterdam: 1982.
[1985] Existence of spectral values for irreducible C_0 -semigroups.
Tübingen, Preprint 1985.

Schaefer, H.H.; Wolff, M.P.H.; Arendt, W.

- [1978] On lattice isomorphisms with positive real spectrum and groups of
positive operators.
Math. Z. 164 (1978), 115-123.

Schep, A.R.

- [1985] Weak Kato-inequalities and positive semigroups.
Math. Z. 190 (1985), 305-314.

Seever, G.L.

- [1973] Measures on F-spaces.
Trans. Amer. Math. Soc. 133 (1973), 267-280.

Semadeni, Z.

- [1971] Banach Spaces of Continuous Functions.
Warszawa: Polish Scientific Publishers 1971.

Simon, B.

- [1973] Ergodic semigroups and positivity preserving self-adjoint operators.
J. Funct. Anal. 12 (1973), 335-339.
[1977] An abstract Kato's inequality for generators of positivity preserving
semigroups.
Indiana Univ. Math. J. 26 (1977), 1067-1073.
[1979] Kato's inequality and the comparison of semigroups.
J. Funct. Anal. 32 (1979), 97-101.
[1982] Schrödinger semigroups.
Bull. Amer. Math. Soc. 7 (1982), 447-526.

Slemrod, M.

- [1976] Asymptotic behavior of C_0 -semigroups as determined by the spectrum of the generator.
Indiana Univ. Math. J. 25 (1976), 783-892.

Stern, R.J.

- [1982] A note on positively invariant cones.
Appl. Math. Optim. 9 (1982), 67-72.

Stewart, H.B.

- [1974] Generation of analytic semigroups by strongly elliptic operators.
Trans. Amer. Math. Soc. 199 (1974), 141-162.

Størmer, E.

- [1972] On projection maps on von Neumann algebras.
Math. Scand. 50 (1972), 42-50.

Takesaki, M.

- [1979] Theory of Operator Algebras I.
New York-Heidelberg-Berlin: Springer 1979.

Travis, C.; Webb, G.F.

- [1974] Existence and stability for partial functional differential equations.
Trans. Amer. Math. Soc. 200 (1974), 395-418.

Triggiani, R.

- [1975a] Pathological asymptotic behavior of systems in Banach spaces.
J. Math. Anal. Appl. 49 (1975), 411-429.
[1975b] On the stabilizability problem in Banach spaces.
J. Math. Anal. Appl. 52 (1975), 383-403.

Trotter, H.F.

- [1974] Approximation and perturbation of semigroups.
In: Butzer, Sz.-Nagy: Lineare Operatoren und Approximation II, Proceedings on a Conference in Oberwolfach 1974. Birkhäuser 1974.

Uhlig, H.

- [1979] Derivationen und Verbandshalbgruppen.
Dissertation, Tübingen 1979.

Vidav, I.

- [1970] Spectra of perturbed semigroups with applications to transport theory.
J. Math. Anal. Appl. 30 (1970), 264-279.

Villella-Bressan R.

- [1985] Functional equation of delay type in L^1 -spaces.
Ann. Polon. Math. 45 (1985), 93-104.

Voigt, J.

- [1980] A perturbation theorem for the essential spectral radius of strongly continuous semigroups.
Monatsh. Math. 90 (1980), 153-161.
[1982] On the abscissa of convergence for the Laplace transform of vector valued measures.
Arch. Math. (Basel) 39 (1982), 455-462.
[1984a] Positivity in time dependent linear transport theory.
Acta Appl. Math. 2 (1984), 311-331.
[1984b] Spectral properties of the neutron transport equations.
To appear in: J. Math. Anal. Appl.
[1984c] Absorption semigroups, their generators and Schrödinger semigroups.
Preprint 1984.
[1984d] On substochastic C_0 -semigroups and their generators.
Semesterbericht Funktionalanalysis, Tübingen, Wintersemester 1984/1985, 71-85.
[1985] Interpolation for positive C_0 -semigroups on L^p -spaces.
Math. Z. 188 (1985), 283-286.

Watanabe, S.

- [1982] Asymptotic behaviour and eigenvalues of dynamical semigroups on operator algebras.
J. Math. Anal. Appl. 86 (1982), 411-424.

Webb, G.F.

- [1977] Volterra integral equations and nonlinear semigroups.
Nonlinear Analysis 1 (1977), 415-427.
[1984] A semigroup approach to the Sharpe-Lotka theorem.
In: F. Kappel; W. Schappacher (eds.): Infinite-dimensional Systems, Retzhof 1983. Lecture Notes in Math. 1076, 254-268. Berlin-Heidelberg-New York: Springer 1984.
[1985a] Theory of Nonlinear Age-Dependent Population Dynamics.
New York: Marcel Dekker 1985.
[1985b] An operator-theoretic formulation of asynchronous exponential growth.
Preprint 1985.

Widder, D.V.

- [1946] The Laplace Transform.
Princeton (N.J.): Princeton University Press 1946.
[1971] An Introduction to Transform Theory.
New York: Academic Press 1971.

- [1971] An Introduction to Transform Theory.
New York: Academic Press 1971.

Wielandt H.

- [1950] Unzerlegbare, nicht-negative Matrizen.
Math. Z. 52 (1950), 642-648.

Winkler, W.

- [1973] A note on continuous one-parameter zero-two law.
Ann. Prob. 1 (1973), 341-344.

Wolff, M.P.H.

- [1978] On C^0 -semigroups of lattice homomorphisms on a Banach lattice.
Math. Z. 164 (1978), 69-80.
[1981] A remark on the spectral bound of the generator of a semigroup of positive operators with application to stability theory.
In: P.L. Butzer, B. SZ.-Nagy, E. Görlich (eds.): Functional Analysis and Approximation. Proc. Conf. Oberwolfach 1980, 39-50. Basel-Boston-Stuttgart: Birkhäuser 1981.

Yamamuro, S.

- [1984] A note on positive semigroups.
Preprint. Canberra 1984.
[1985] Absolute values in orthogonally decomposable spaces.
Bull. Australian Math. Soc. 31 (1985), 215-233.

Yosida, K.

- [1948] On the differentiability and representation of one-parameter semi-groups of linear operators.
J. Math. Soc. Japan 1 (1948), 15-21.
[1965] Functional Analysis 1965.
6th printing: Berlin-Heidelberg-New York: Springer 1980.

Yosida, K.; Kakutani, S.

- [1941] Operator-theoretical treatment of Markoff's process and mean ergodic theorem.
Ann. of Math. 42 (1941), 188-228.

Zaanen, A.C.

- [1983] Riesz Spaces II.
Groningen: North Holland 1983.

Zabczyk, J.

[1975] A note on C_0 -semigroups.

Bull. Acad. Polon. Sci. 23 (1975), 895-898.

[1979] Stabilization of boundary control systems.

Int. Symp. Systems Opt. Anal. 1978. Lecture Notes Control Theory Inform.
Berlin-Heidelberg-New York: Springer 1979.

Zaidman, S.D.

[1979] Abstract Differential Equations.

London: Pitman 1979.

TABLE OF SYMBOLS

$E_{\mathbb{R}}, E_{\mathbb{C}} = E$	real , complex Banach lattice
E_+	positive cone
E'	dual
E^*	semigroup dual
E_F^T	F -product of E with respect to the semigroup T
E_F	F -product of E
E_f	see C-I,4
(E, ϕ)	see C-I,4
$E \otimes F$	tensor product
$L(E)$	bounded linear operators on E
$Z(E)$	center of E
E_n	n -th Sobolev space
$B(H)$	W^* -algebra of all bounded linear operators on H
$S(M)$	state space of a C^* -algebra M
M_+	positive cone of the C^* -algebra M
M_*	predual
M^{sa}	self-adjoint part
M_n	C^* -algebra of all $n \times n$ -matrices
AC	absolutely continuous functions
BV	functions of bounded variation
K	compact topological space
X	locally compact topological space
$C(K), C(K, E)$	continuous functions (with values in E)
$C_0(X), C_0(X, E)$	continuous functions vanishing in infinity with values in E
$C_b(X)$	bounded continuous functions
$C_{bu}(X)$	uniformly continuous functions
$C^1, C^{(n)}$	continuous differentiable functions (n -times)
$C_c^\infty(\mathbb{R}^n)$	infinitely differentiable functions with compact support
$L^p(\mu)$	p -integrable functions
$S(\mathbb{R}^n)$	Schwartz space
$M(K)$	regular Borel measures
$M_b(X)$	bounded regular Borel measures
$T = (T(t))_{t \geq 0}$	(one-parameter) semigroup
$T $	subspace (reduced) semigroup
$T/$	quotient semigroup
$\text{Fix}(T)$	fixed space of T

A	generator
A'	adjoint
A^*	adjoint generator
$\sigma(A)$	spectrum
$\rho(A)$	resolvent set
$\sigma_{\text{ess}}(A)$	essential spectrum
$\sigma_b(A)$	boundary spectrum
$P\sigma(A)$	point spectrum
$P\sigma_b(A)$	boundary point spectrum
$A\sigma(A)$	approximate point spectrum
$R\sigma(A)$	residual spectrum
$\omega = \omega(A) = \omega(T) = \omega(T(t))$	growth bound
$s(A)$	spectral bound
$\omega_1(A)$	growth bound of the solution of the (ACP)
$\omega(f)$	growth bound of $T(\cdot)f$
$r(T)$	spectral radius
$\omega_{\text{ess}}(A)$	essential growth bound
$r_{\text{ess}}(T)$	essential spectral radius
$R(\lambda, A)$	resolvent operator
$I^d, \{I^d\}^d = I^{dd}$	orthogonal band of I (of I^d)
\wedge	infimum
\vee	supremum
$ T $	modulus of a regular operator
\tilde{f}, \check{f}	Fourier (inverse Fourier) transformation
$dp(f)$	subdifferential of p in f
$dN(f)$	subdifferential of the norm in f
$dN^+(f)$	subdifferential of the canonical half-norm in f
im	range
\ker	null-space
Im	imaginary part
Re	real part
Ref, Imf	see C-I,7
ReT, ImT	see C-I,7
\bar{f}	complex conjugate of f
S_f	signum operator with respect to f
$\text{sign } f$	signum of f
$\hat{\text{sign}} f$	see C-II,2.2
$f^{[n]}$	B-III,2.2 ; C-III,2.1
$ f $	absolute value of f
f^+	positive part of f
f^-	negative part of f

I_d	identity operator
M_P	multiplication operator
1	function identically 1
1_C	characteristic function of the set C
δ_x	Dirac measure in x
tr	trace
$\text{span } M$	linear subspace generated by M
$S(\alpha)$	sector in the complex plane
(ACP)	abstract Cauchy problem
(P)	positive minimum principle
(P')	B-II, 1.21
(K)	Kato's (equality) inequality
(RCP)	retarded Cauchy problem
(RE)	retarded equation
(T)	translation property

SUBJECT INDEX

- Abelian group 390f
 - locally compact -- 390f
 - solenoidal -- 391
- abscissa
 - of absolute convergence 103f
 - of simple convergence 103
 - of holomorphy 101
- absolute value 235, 239
- abstract Cauchy problem
 - 4, 26ff, 98ff, 336
- adjoint 16f, 400
 - generator 17f
 - operator 16, 64f, 77, 141
 - semigroup 16ff
- admissible function 154ff
- algebra homomorphism 143ff
- algebraic multiplicity 73
- AL-space 239
- AM-space 239
- approximation theorems
 - 32f, 44, 81, 116
- asymptotics
 - 98ff, 204ff, 342ff, 352, 406ff
- automorphism group 146ff
- Banach lattice 235
 - complex -- 243, 260, 288
 - real -- 243
- band 236
 - projection 237
- boundary spectrum 169ff, 296ff, 302ff, 305, 379ff, 387
- C*-algebra 117, 369
- Calkin algebra 73
- Cauchy problem 4, 26ff
 - abstract -- 4, 26ff, 98ff, 336
 - autonomous -- 4, 26ff
 - homogeneous -- 4, 98ff
 - inhomogeneous -- 112ff, 340ff
 - retarded -- 219ff, 356ff
 - well-posed -- 26ff
- center 246, 272, 279f, 288
- Césaro
 - mean 346, 406, 408
 - summable 93f
- Chapman-Kolmogorov equation 213f
- characteristic equation 180, 229, 362
 - generalized -- 226, 362
- characterization
 - of generators 122ff, 247ff, 260ff, 376ff
- chain rule 136
- closable 5f, 52, 128
- closure 5f, 52, 128
- cocycle 148ff
- cone
 - positive - 51, 234, 369
- conditional expectation
 - normal -- 411f, 416
- core 5f, 46f
- cyclic 169, 172ff, 192ff, 302ff, 305, 379ff, 388ff
 - imaginary additively - 172ff, 192ff, 302ff
- Datko's theorem 108f
- decomposition 68ff, 325ff, 351ff
- delay
 - differential equation 219ff
 - equation 356ff
- derivation 143ff
- derivative
 - first order - 9ff, 146, 184f, 220, 265, 276, 308f, 357
 - higher order - 267f
 - second order - 11f, 34f, 179, 185, 249f, 308f
- differential equation
 - homogeneous -- 4, 98f
 - inhomogeneous -- 112ff, 340ff
 - ordinary -- 152f, 197f, 219ff
 - partial -- 26
 - retarded -- 134f, 142, 179f, 219ff
 - system of -- 365
- differential operator 9ff, 11ff, 34f, 146, 179, 185, 220, 259f, 265, 267f, 276, 308f, 357
- disjointness preserving
 - operator 281
 - semigroup 281ff
- dispersive 249ff
 - strictly - 249ff
- dissipative 47ff
 - p- 48ff, 128ff
 - strictly - 48ff
- Doebelin's condition 218, 345
- domain 3, 9, 46f
 - Fredholm - 73f
- domain of uniqueness 46f

- dominant spectral value
 - 177ff, 304, 318ff
 - strictly ---
 - 177ff, 210, 217, 318ff
- domination 269ff, 371
- dual 16
 - semigroup - 16f
- Dunford-Pettis property 56
- eigenspace 64, 86
- eigenvalue 64, 387
 - approximate - 64, 314
 - simple - 73, 305, 310, 388
 - normalized - 389
- eigenvector 64, 387
 - approximate - 64, 314
- elliptic differential operator
 - 185, 190f, 260, 305, 312
- equation
 - differential - 4
 - heat - 13
 - population - 229, 344f, 354f, 364ff
 - retarded - 356ff
 - transport - 309f, 320
- example
 - counter -
 - 3, 61ff, 105, 131, 265ff, 311
 - standard - 7ff, 9, 10, 11, 12,
 - 42ff, 100f, 124, 280, 416
- exponential estimate 2f
- F-product 20f, 298ff, 314ff
- F-product with respect to a semigroup
 - 20f, 74ff, 192
- face 388
 - invariant - 388, 410
- faithful subset 380
- Féjer's theorem 93f
- Feller property
 - strong -- 213
- fixed space 343ff, 374ff, 380ff, 414
- flow 143ff
 - continuous - 148, 192ff, 330
 - semi - 143ff, 328ff
 - seperately continuous - 149f
- forcing term 112ff, 340ff
 - periodic -- 116
 - p-periodic -- 113ff
- Fourier transformation 12f, 91, 252
 - inverse -- 13, 91
 - coefficient 80
- Fredholm
 - domain 73f
 - operator 73f
- Gateaux-derivative 50, 136, 257, 283
- generalized solution 99, 112
- generator 3ff
 - adjoint - 16
 - bounded - 2, 7, 54ff, 129, 247,
 - 255, 288, 376ff
 - weak* - 16
- geometric multiplicity 73
- graph 5
 - graph norm 5
- Grothendieck space 55ff
- group 1, 6, 9, 34, 66, 146ff,
 - 326f, 352ff, 390f
 - automorphism - 146ff
 - lattice homomorphism 202
 - one-parameter - 1, 6, 31
 - positive - 146, 148ff, 295, 326f
 - rotation - 10, 69, 352ff
 - unitary - 13
- growth bound 2, 6, 60ff
 - of a semigroup 2, 6, 60ff, 74,
 - 99ff, 130, 168, 204ff, 295,
 - 334ff, 343, 400ff
 - of mild solutions of a Cauchy problem
 - 99ff
 - of solutions of a Cauchy problem
 - 99ff, 204ff, 336ff
 - essential -- 74, 343
- half-norm 51ff, 127ff
 - canonical - 51ff, 127ff, 255ff
 - strict - 51ff, 127ff
- heat equation 13
- Hilbert space 13, 62, 94ff, 105, 403
- Hille-Yosida theorem 32
- ideal 236
 - algebraic - 118
 - closed - 118, 236
 - invariant - 182ff, 303, 306ff, 317
 - lattice - 236
- imaginary additively cyclic subset
 - 172ff, 192ff, 297
- inhomogeneous differential equation
 - 112ff, 340ff
- integral equation 363
- interpolation 335, 348, 352
- invariant
 - ideals 182ff, 303, 306ff, 317
 - subset 24, 346
- irreducible 138ff, 256ff, 414
 - semigroup 130, 182ff, 210, 306ff,
 - 311ff, 315ff, 409ff
 - W*-- 388

- Jordan decomposition 384, 389, 420
- Kakutani-Krein theorem 240, 297, 313, 334
- Kato's
- equality 138ff, 285ff, 325f
 - inequality 139, 256ff, 258ff, 285
 - classical - 139f, 258f
 - distributional - 259f
- Krein-Rutman theorem 130, 167, 334
- Laplace transform 101, 107
- Laplacian 13, 34f, 100, 110, 139, 168, 185, 205, 250f, 258, 338
- lattice
- homomorphism 120, 243, 244, 281
 - norm 235
- locality 146f, 268f, 282, 287
- long term behavior 98ff, 204ff, 342ff, 352, 406ff
- Lumer-Phillips theorem 53f
- Markov
- algebra homomorphism 143ff
 - lattice homomorphism 120, 192ff, 200f
 - operator 120, 191
 - process 213f
 - semigroup 144, 191
 - transition function 213f, 347f
- matrix semigroup 7
- maximum principle 185, 190
- mild solution 99, 112
- modulus 136, 257, 278ff, 281
- multiplication
- operator 7f, 89f, 246
 - semigroup 7f, 42ff, 65f, 287ff
- multiplicity 73ff
- algebraic - 73f, 209, 310
 - as a pole 73
 - geometric - 73, 310
- negative part 235
- norm
- graph - 5
 - Sobolev - 18ff
- normal linear functional 369
- operator
- closable - 5f
 - closed - 5f
 - contractive - 47ff
 - densely defined - 4
 - differential - 9ff
 - dissipative - 47ff
 - dispersive 249ff
 - elliptic - 185, 190f, 260, 305, 312
 - kernel - 184, 189f, 308ff, 320, 349f, 363, 367
 - lattice - 120, 242
 - local - 146f, 268f, 282, 287
 - Laplace - 13, 34f, 100, 110, 139, 168, 185, 205, 250f, 258, 338
 - multiplication - 7f, 89f, 246, 287
 - positive - 120ff
 - p-contractive - 48ff
 - p-dissipative - 48ff, 128ff
 - resolvent positive - 127ff
 - Schrödinger - 179, 273, 278f, 336
 - strictly dissipative - 48ff
 - strictly p-dissipative - 48ff
 - strictly dispersive 249ff
 - weakly compact - 181, 211f
- operator semigroup 1ff, 406
- weakly compact -- 406f
- 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, 295
 - vector space 234
- periodic
- semigroup 10, 79ff, 85, 313, 416
- p-periodic 113ff
- Perron-Frobenius theory 163ff, 172ff, 292ff, 296ff, 379ff
- perturbation
- additive - 43ff
 - bounded - 44ff, 307
 - compact - 215f, 319
 - multiplicative - 131ff, 141
- perturbation by multiplication operators 179, 183, 188, 274ff, 279, 307
- perturbation theorems 43ff
- Phillip's theorem 249
- polar decomposition 380, 392
- pole 67f, 72ff, 76, 209ff, 305, 315ff
- algebraically simple - 73f, 181, 185, 209ff, 216, 315ff
 - of order k 73f, 86, 174f, 295, 303ff
 - simple - 73f, 209ff, 310, 315ff
 - first order - 73f, 180

- population equation 229ff, 344f, 354f, 364ff
- positive part 235
- positive minimum principle 125ff, 133ff, 253ff, 268
- positive subeigenvector 261
- positivity 118, 119, 120, 123ff, 238, 242, 244, 370
 - n- 370, 403
 - strict - 118, 119, 120, 238, 242, 310, 316
- predual 369
- projection 72, 209ff, 343ff, 410ff, 423
 - ergodic - 410ff, 424
 - recurrent - 407
 - semigroup - 209ff, 310, 343ff, 411
 - spectral - 68ff
- pseudo-resolvent 298ff, 314ff, 372ff, 383ff, 392ff, 419ff
 - positive - 299ff
- quasi-compact 214ff, 343ff
- quasi-interior point 238, 306
- range condition 53f, 146f, 249, 270
- regular mapping 242, 272, 279f
- regularity 242, 272, 279f
- residue 67f, 72ff, 309ff, 395ff
- resolvent 63ff, 370
 - compact - 40, 73, 130, 166, 177, 305, 318, 336
 - positive - 123ff
 - pseudo - 298ff, 314ff, 372ff, 383ff, 392ff, 419ff
 - slowly growing - 301ff
- resolvent 6, 63ff, 370
 - equation 127, 298
 - integral representation 6, 293ff
 - positive 127
 - set 63ff, 75
- retarded
 - differential equation 219ff
 - equation 356ff
- Riesz Decomposition theorem 237
- Riesz Schauder theory 72f
- Schrödinger operator 273f, 278f, 336
- Schwarz map 370ff, 379ff, 381ff, 407ff
 - identity preserving -- 370ff, 379ff, 381ff, 408ff
- Schwarz inequality 370
- Schwartz space 12, 250
- self-adjoint part 369
- semiflow 143ff, 328ff
 - continuous - 144ff, 192
 - injective - 193
 - surjective - 193
- semigroup 1ff
 - adjoint - 16ff, 77, 400
 - analytic - 33ff
 - bounded - 3
 - bounded holomorphic (of angle α) - 33ff, 110
 - compact - 40ff
 - commuting - 24
 - contraction - 3, 47ff, 247ff, 297f, 397
 - convolution - 12
 - differentiable - 37f, 41
 - diffusion - 11ff
 - disjointness preserving - 281ff
 - eventually compact - 40ff, 209, 211, 214
 - eventually differentiable - 37, 41
 - eventually norm continuous - 38ff, 41, 87ff, 106, 178, 304f, 318, 337, 345
 - F-product - 20f, 74ff, 192
 - holomorphic (of angle α) - 33ff, 41, 100, 183, 305ff, 311ff
 - identity preserving - 370ff, 379ff, 389ff, 408ff, 424f
 - implemented - 403
 - induced - 14f, 74ff, 298, 374
 - irreducible - 182ff, 210, 315ff, 388ff, 409ff
 - lattice homomorphism - 135ff, 143ff, 192ff, 285, 320ff
 - Markovian - 144ff, 191
 - matrix - 7
 - mean-ergodic - 346
 - modulus - 278ff, 282ff
 - multiplication - 7f, 42ff, 65f, 287ff
 - nilpotent - 11, 41f, 74ff
 - norm continuous - 38ff, 41
 - of Schwarz type 370ff, 379ff, 408ff, 424f
 - one-parameter - 1
 - partially periodic - 352ff, 416ff
 - periodic - 79ff, 85, 313, 416
 - positive - 123ff
 - preadjoint - 414
 - quasi-compact - 214ff, 343ff
 - quotient - 15, 74
 - reduced - 374, 407
 - rescaled - 14
 - rotation - 10, 69, 189, 313, 352ff
 - similar - 13f
 - Sobolev - 18ff
 - strongly continuous - 2ff
 - strongly ergodic - 406, 408ff, 424f
 - subspace - 14f, 74

- tensor product - 21ff, 88f
- translation - 9f, 11, 15, 18, 41, 66ff, 205
- uniformly continuous - 2, 7, 54ff, 129, 247, 255, 288, 376ff
- uniformly ergodic - 391ff, 416, 419, 424f
- weakly continuous - 2
- weak* continuous - 16, 370ff, 403
- weak*-irreducible - 388, 414, 424f
- semigroup dual 16f, 77
- signum 137ff, 256ff, 276, 296f
 - operator 170ff, 245, 256ff, 296
- singularity
 - isolated - 72ff
- Sobolev space 18ff
 - classical -- 19
- solid subset 236
- solution of a Cauchy problem 4, 27ff
 - generalized - 99, 112ff
 - mild - 99, 112ff
 - p-periodic - 113ff
 - strong - 27ff, 99, 112ff, 219ff, 356ff
- spectral
 - decomposition 68ff, 325ff, 351f
 - projection 69f, 79
 - theorem 60ff, 82ff
- spectral bound 60ff, 101f, 105ff, 130, 163, 168, 204ff, 225, 292ff, 316, 334ff, 361, 379, 400ff
 - essential -- 73f, 214ff, 318
- spectral inclusion theorem 84f
- spectral mapping theorem 60ff, 67, 82ff, 106
 - weak --- 65f, 83f, 89ff
 - for the resolvent 67f
- spectral radius 60
 - essential -- 73f, 177, 214ff, 318
- spectral value
 - dominant -- 177ff
 - strictly dominant -- 177ff, 210, 217
- spectrum 60ff
 - approximate point - 64f, 394
 - boundary - 169ff, 296ff, 302ff, 305, 379ff, 387
 - cyclic - 169, 172ff, 302ff, 305, 379ff, 388ff
 - essential - 73f
 - point - 64f, 394
 - residual - 64f
- stability
 - 98ff, 227, 337ff, 361, 402ff
 - exponential - 99ff, 227
 - uniform - 99f, 339, 402ff
 - uniform exponential - 99f, 205, 402ff
 - weak - 111f, 205f, 402ff
 - weak uniform - 111f
- state space 369, 400
- stationary point 156
- stochastic continuity 213f
- strictly positive
 - 118, 119, 120, 238, 242, 261
 - element 261
 - functional 238, 261
 - operator 242
 - subset 261ff
- subdifferential 48ff, 128ff
- subeigenvector 261
 - positive - 261
- subinvariant subset 380
- sublattice 236
- sublinear function 47f
- tensor product
 - of Banach spaces 21ff
 - of operators 21ff
 - of semigroups 21ff, 88f
- translation property 220, 358
- translation semigroup 9f, 15, 18, 61f, 66ff, 75, 205
 - nilpotent -- 11, 41f, 83, 164f
 - periodic -- 66
- transformation
 - Fourier - 12f
 - Laplace - 101, 107
- transport equation 309f, 320
- type of a semigroup 2
- ultrapower 315, 377, 394, 420
- unimodular function 313
- unitary 390
- vector
 - lattice 235
 - sublattice 236
- W*-algebra 369
- W*-dynamical system 414ff
 - irreducible -- 414ff
- weakly sequentially compact 242, 322
- well-posedness 26ff
- Zero-Two law (0-2 law) 347ff