

ANTON R. SCHEP

PERSONAL DATA

Date of Birth: April 26, 1951

Place of Birth: Rotterdam, The Netherlands

EDUCATION

PhD: University of Leiden, The Netherlands, 1977

BSc: University of Leiden, The Netherlands, 1974

PROFESSIONAL EXPERIENCE

Professor, University of South Carolina, 1990-present

Chair, University of South Carolina, 2012-2018

Assistant Chair, University of South Carolina, 2005-2012

Graduate Director, University of South Carolina, 1989-1994, 1995-2004

MAT Director, University of South Carolina, 1995–2004

Associate Professor, University of South Carolina, 1984-1990

Assistant Professor, University of South Carolina, 1981-1984

Research instructor, California Institute of Technology, 1977-1981

FELLOWSHIPS AND HONORS

Visiting Research Fellow, Flinders University, Bedford Park, South Australia, June 1984.

Visiting Research fellow, Flinders University, Bedford Park, South Australia, June-August 1987.

Alexander von Humboldt Research Fellow, University of Tübingen, Federal Republic of Germany, October 1987 - May 1988.

Visiting Professor, Delft University of Technology, Delft, The Netherlands, September - November 1994.

(Corresponding) Member Royal Dutch Academy of Sciences, 1995–present

EDITORIAL BOARDS

Positivity, An international Mathematics Journal devoted to the Theory and Applications of Positivity, Birkhäuser, 2007-present.

Indagationes Mathematicae, Editor Special Issue, 2020.

CONFERENCE AND SEMINAR TALKS.

Close to 40 invited or contributed talks at national and international meetings and over 20 seminar or colloquium talks at other institutions.

UNDERGRADUATE STUDENT SUPERVISION

1. Katie G. Spurrier, “Continuous Nowhere Differentiable Functions”, Honor’s College Thesis, 2004.
2. Robin Neumayer, “Lebesgue Integration by Completion”, Honor’s Thesis, 2012.
3. Simon Peralta, “Schwarz-Christoffel Transformations”, Distinction Thesis, 2015

GRADUATE STUDENT SUPERVISION

MASTER'S STUDENTS

1. Yong S. Shim, "Summability of eigenvalues of Hille-Tamarkin operators", 1984
2. Gary C. de la Pena, "Rearrangement of series in normed spaces", 1990.
3. J.P. Deshabandu, "Zero-Two law in Banach lattice algebras", 1990.
4. X. Deng, "A review of some important conclusions about the paving conjecture", 2010.

PH.D. STUDENTS

1. Colin Day, "Spectral Mapping Theorems of integrated semigroups", 1992
2. James Sweeney, "States and the Numerical Range in the Regular Algebra", 2018.

PUBLICATIONS

1. *Order continuous components of operators and measures*, Proc. of the Kon. Akad. v. Wet. series A **81** (1978), 110–117.
2. (with W.A.J. Luxemburg), *A Radon–Nikodym theorem for positive operators and a dual*, Proc. of the Kon. Akad. v. Wet. series A **81** (1978), 357–375.
3. *Kernel operators*, Proc. of the Kon. Akad. v. Wet. series A **82** (1979), 39–53.
4. (with W.A.J. Luxemburg), *An extension theorem for Riesz homomorphisms*, Proc. of the Kon. Akad. v. Wet. series A **82** (1979), 145–154.
5. *Generalized Carleman operators*, Proc. of the Kon. Ned. Akad. v. Wet. series A **83** (1980), 49–59.
6. *Positive triangular and diagonal operators*, Jour. of Oper. Theory **3** (1980), 165–178.
7. *Compactness properties of an operator which imply it is an integral operator*, Trans. of the Amer. Math. Soc. **265** (1981), 111–119.
8. *On compactness of integral operators*, Proc. Conf. Meas. Theory, Univ. of Northern Illinois, 1980.
9. (with P.G. Dodds), *Compact integral operators on Banach function spaces*, Math. Zeitschrift **180** (1982), 249–255.
10. *Integral Operators, From A to Z*, Proc. of a Symp. in honour of A.C. Zaanen, MC tract 149, ed. C.B. Huijsmans, 1982, pp. 81–93.
11. *On factorization of positive multilinear operators*, Illinois J. of Math. **28** (1984), 579–591.
12. *Compactness properties of Carleman and Hille-Tamarkin operators*, Can. J. of Math. **37** (1985), 921–933.
13. *Weak Kato-inequalities and positive semigroups*, Mathemat. Zeitschrift **190** (1985), 305–314.
14. (with P.G. Dodds, G. Buskes and B. de Pagter), *Up-Down theorems in the centre of $L_b(E, F)$* , Proc. of the Kon. Akad. v. Wet. series A **89** (1986), 1–10.
15. *Compact non-nuclear operators on Banach lattices*, Semesterbericht Funktionanal. Tübingen, Sommersemester, 1985, pp. 157–174.
16. *Composition and nuclearity of kernel operators*, Jour. of Operator Theory and Integral Equations **11** (1988), 437–454.
17. (with B. de Pagter), *Measures of non-compactness of operators in Banach lattices*, Jour. of Functional Analysis **78** (1988), 31–55.
18. *Measures of non-compactness of a disjointness preserving operator*, J. of Operator Theory **21** (1989), 397–402.
19. (with W. Ricker), *The non-emptiness of joint spectral subsets of \mathbf{R}^n* , Austral. J. of Math. **47** (1989), 300–306.
20. *A remark on the uniform zero-two law for positive contractions*, Archiv der Math **53** (1989), 493–496.
21. (with M. Wolff), *Semiconpact operators*, Indag. Math., N.S. **1** (1990), 115–125.
22. (with R. Howard), *Norms of positive operators on L^p -spaces*, Proc. A.M.S. **109** (1990), 135–146.
23. *Krivine's theorem and the indices of a Banach lattice*, Acta Appl. Math. **27** (1992), 111–121.
24. (with J.M.A.M. van Neerven, B. de Pagter), *Weak measurability of the orbits of an adjoint semigroup*, Evolution equations, Lecture Notes in Pure and Applied Mathematics, vol. 168, Marcel Dekker, 1994, pp. 327–336.

25. *Minkowski's integral inequality for function norms*, Operator Theory in Function Spaces and Banach lattices, Operator Theory, Advances and Applications, vol. 75, Birkhäuser, Basel–Boston–Berlin, 1995, pp. 299–308.
26. (with B. de Pagter, W.A.J. Luxemburg), *Diagonals of powers of an operator on a Banach lattice*, Operator Theory in Function Spaces and Banach lattices, Operator Theory, Advances and Applications, vol. 75, Birkhäuser, Basel–Boston–Berlin, 1995, pp. 223–274.
27. (with B. de Pagter), *Positive definite diagonal sequences*, Acta Universitatis Carolinae, Math. et Phys. **36** (1995), 73–83.
28. (with B. de Pagter), *Diagonals of positive semigroups*, Integral. Eq. and Oper. Th. **27** (1997), 446–472.
29. (with B. de Pagter), *Band decompositions for disjointness preserving operators*, Positivity **4** (2000), 259–288.
30. *And Still One More Proof of the Radon-Nikodym Theorem*, Amer. Math. Monthly **110** (2003), 536–538.
31. *Daugavet type inequalities on L^p -spaces*, Positivity **7** (2003), 103–111.
32. *Convex Solid Sets of $L_0(X, \mu)$* , Accepted for publication, Positivity (2004).
33. *Positive Operators on L^p -spaces*, Positivity, Trends in Mathematics, Birkhäuser, Basel–Boston–Berlin, 2007, pp. 229–254.
34. *A simple complex analysis and an advanced calculus proof of the Fundamental theorem of Algebra*, Amer. Math. Monthly **116** (2009), 67–68.
35. *Products of Cesaro convergent sequences with applications to convex solid sets and integral operators*, Proc. of the AMS **137** (2009), 579–584.
36. *The order continuous dual of the regular integral operators on L^p* , Vladikavk. Math. J. **11** (2009), 45–48.
37. *When is the optimal domain of a positive linear operator a weighted L^1 -space*, Vector measures, Integration and related Topics, Operator theory, Advances and Applications, vol. 201, Birkhäuser, Basel–Boston–Berlin, 2010, pp. 361–370.
38. *Products and factors of Banach function spaces*, Positivity **14** (2010), 301–319.
39. *Bounds on the spectral radius of Hadamard products on ℓ_p -spaces*, Electr. J. of Linear Algebra **22** (2011), 443–447.
40. *Cone isomorphisms and almost subjective operators*, Indagationes Mathematicae **25** (2014), 366–375.
41. (with Jinxi Chen), *Two-sided multiplication operators on the space of regular operators* **144** (2016), 2495–2501.
42. (with Koos Grobler, Rien Kaashoek, and Pieter Zaanen), *Adriaan Cornelis Zaanen*, Ordered Structures and Application, Trends in Mathematics, Birkhäuser, Basel–Boston–Berlin, 2016, pp. xi–xxi.
43. *Unbounded disjointness preserving linear functionals and operators*, Archiv der Mathematik **107** (2016), 623–633.
44. (with James Sweeney), *Regular states and the regular algebra numerical range*, Positivity and Noncommutative Analysis, Trends in Mathematics, Birkhäuser/Springer, Basel–Boston–Berlin, 2019, pp. 511–535.
45. *Levensbericht Wilhelmus Anthonius Josephus Luxemburg*, Levensberichten en herdenkingen 2019, Royal Dutch Academy of Sciences, 2019, pp. 116–121.
46. (with Peter G. Doods and Ben de Pagter), *W. A. J. Luxemburg (1929–2018) [editorial]*, Indagationes Mathematicae **31** (2020), 739–740.