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Research Interests

My research centers around the study of geometric, algebraic and topological properties on Banach algebras associated to locally compact groups, and the study of non-linear fixed point properties and ergodic type properties related to harmonic analysis on groups and semigroups.

Selected Publication

- [1] (with H.G. Dales, F. K. Dashiell, Jr., and D. Stauss). Banach Spaces of Continuous Functions as Dual Spaces, *Springer Verlag*, (2016).
- [2] (with Hung Le Pham) Characterizations of Fourier and Fourier-Stieltjes algebras on locally compact groups. *Adv. Math. 289* (2016), 844–887.
- [3] (with Ali Ulger) Characterization of closed ideals with bounded approximate identities in commutative Banach algebras, complemented subspaces of the group von Neumann algebras and applications. *Trans. Amer. Math. Soc. 366* (2014), no. 8, 4151–4171.
- [4] (with Richard J. Loy) Fourier-Stieltjes algebras and measure algebras on compact right topological groups. *J. Funct. Anal. 266* (2014), no. 8, 4870–4889.
- [5] (with Ngai-Ching Wong) Orthogonality and disjointness preserving linear maps between Fourier and Fourier-Stieltjes algebras of locally compact groups.) *J. Funct. Anal. 265* (2013), no. 4, 562–593.
- [6] (with Y. Zhang). "Fixed Point Properties for semigroups of nonlinear mappings and amenability", *Journal of Functional Analysis 263* (2012), no. 10, 2949–2977.

- [7] (with J. Ludwig). "Fourier-Stieltjes algebra of a topological group", *Advances of Mathematics 229* (2012), no.3, 2000-2023.
- [8] (with E. Kaniuth and A. Ulger). "Power boundedness in Fourier and Fourier-Stieltjes algebras and other commutative Banach algebras", *Journal of Functional Analysis* 260 (2011), no. 8, 2366-2386.
- [9] (with H.G. Dales and D. Stauss). "Banach algebras on semigroups and on their compactifications", *Memoir of American Mathematical Society*, 295 no. 205 (2010), 165 pages.
- [10] (with M. Leinert). "Fixed point property and the Fourier algebra of a locally compact group", *Transactions of American Mathematical Society 360* (2008), 6389-6402.
- [11] (with E. Kaniuth) "Extension and separation properties for positive definite functions on locally compact groups". *Transactions of American Math Society 359* (2007), 447-463.
- [12] (with A. Paterson) "Group amenability properties for von Neumann algebras", *Indiana University Mathematics Journal* 50 (2006), 1363-1388.
- [13] (with H.G. Dales). "The second duals of Beurling algebras", *Memoir of the American Mathematical Society 117* (2005), no. 936, vi + 191 pp.
- [14] (with R. Loy) "Banach algebras on compact topological groups" *Journal of Functional Analysis 225* (2005), no. 2, 263-300.
- [15] (with E. Kaniuth and G. Schlichting). "Lebesgue type decomposition of subspaces of Fourier-Stieltjes algebras", *Transactions of American Math. Society 355* (2003), 1467-1490.
- [16] (with Cho-Ho Chu). "Harmonic functions on groups and Fourier algebras", *Lecture Notes in Mathematics 1782, Springer Verlag* (2002), 100 pages.
- [17] (with P. Milnes and J. Pym). "On the structure of minimal left ideals in the largest compactification of locally compact groups", *Journal of London Math. Soc. 59* (1999), 133-152.
- [18] (with N. Shioji and W. Takahashi). "Existence of nonexpansive retractions for amenable semigroups of nonexpansive mappings and nonlinear ergodic theorems in Banach spaces", *Journal of Functional Analysis* 161 (1999), 62-75.

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