Complete Bibliography
Palle E. T. Jorgensen

August 2006

All Jorgensen's publications are in refereed journals.

All the journals reject on the order of half (or more) of the submissions.

All the joint papers have at least half of the mathematics due to Jorgensen (if three authors, at least a third, etc.).

For Jorgensen's period at the University of Iowa (since 1984) he has been a senior author and major contributor in all his papers.

The papers are listed from oldest to most recent, but highlighting in the margin shows publication and submission activity in the current and previous year.

Jorgensen's publication activities for the years 2000 to 2005 have been highlighted with shading in the margin, with item 115 the earliest item highlighted.

When the particular publication is joint, co-authors' names are included in parentheses. The first joint paper is no. 11.

NOTE: Where references are given to reviews of these publications in *Mathematical Reviews* (abbreviated M.R.) and in *Zentralblatt für Mathematik* (abbreviated Z.M.), as well as in other journals with a review section, the reviewer's name is mentioned in brackets. World Wide Web locations are given for papers that have been posted in an electronic preprint archive.

Abbreviations of journal and serial titles are those used in *Mathematical Reviews*. Full titles and publishers of these journals are given at the end of the list of Jorgensen's publications.

Research Monographs and Special Invited Research Publications Authored by Jorgensen.

5. *Analysis and Probability: Wavelets, Signals, Fractals*, Graduate Texts in Mathematics, vol. 234, Springer-Verlag, New York, 2006, approx. 320 p., 51 illus., hardcover, ISBN 0-387-29519-4.

4. Unitary Matrix Functions, Wavelet Algorithms, and Structural Properties of Wavelets, Contribution by Palle E. T. Jorgensen to the Tutorial Sessions, Program: "Functional and harmonic analyses of wavelets and frames," 2–12 August 2004, Singapore, accepted for publication for a book series of World Scientific, Proceedings of the Special Year 2004 in Wavelets at the National University of Singapore (Z. Shen, ed.) http://arxiv.org/abs/math.CA/0403117

3. (with O. Bratteli) *Wavelets through a Looking Glass: The World of the Spectrum,* Applied and Numerical Harmonic Analysis, Birkhäuser, Boston, 2002, xxii+398 pp. Z.M. 1012.42023 [Ole Christensen]; M.R. 2003i:42001 [Gilbert Walter]; *SIAM Review* **46** (2004), no. 2, pp. 368–372 [Judith A. Packer]; *J. Operator Theory* **52** (2004), no. 2, pp. 421–424 [Dorin E. Dutkay and Serban Stratila].
    Excerpts: see http://www.math.uiowa.edu/~jorgen/#bookdetails
2. *Operators and Representation Theory: Canonical Models for Algebras of Operators Arising in Quantum Mechanics,* North-Holland Mathematics Studies, vol. 147, Notas de Matemática, vol. 120, North-Holland, Amsterdam–New York, 1988. M.R. 89e:47001 [K. Schmüdgen].
1. (with co-author R.T. Moore) *Operator Commutation Relations,* Mathematics and Its Applications, D. Reidel Publishing Co., Dordrecht–Boston–Lancaster, 1984. Z.M. 535:47020 [F.H. Vasilescu]; M.R. 86i:22006 [D.W. Robinson]; *Current Contents* 17 (1983) [E. Nelson]; London Math. Soc., Bulletin **17** (1985), p. 292 [J.H. Rawnsley]; *Simon Stevin: A Quarterly Journal of Pure and Applied Mathematics* **59** (March 1985), no. 1, pp. 122–123 [A. van Daele].

Research Papers.

166. (with D.E. Dutkay) Analysis of orthogonality and of orbits in affine iterated function systems (TEX manuscript, 22 pages)), preprint, 2006, University of Iowa, submitted to Math. Z.
    http://arxiv.org/abs/math.CA/0606349
165. (with D.E. Dutkay) Fourier frequencies in affine iterated function systems (TEX manuscript, 27 pages), preprint, 2006, University of Iowa; submitted to *J. Funct. Anal.*
    http://arxiv.org/abs/math.FA/0604547
164. Frame analysis and approximation in reproducing kernel Hilbert spaces (TEX manuscript, 19 pages), preprint, 2006, University of Iowa; submitted to a Contemp. Math. volume.
    http://arxiv.org/abs/math.CA/0603661
163. (with Anilesh Mohari) Localized bases in $L^2(0,1)$ and their use in the analysis of Brownian motion (TEX manuscript, 25 pages), preprint, 2005, University of Iowa; submitted to J. Approx. Theory.
    http://arxiv.org/abs/math.CA/0512659
162. (with D.E. Dutkay) Oversampling generates super-wavelets (TEX manuscript, 8 pages), *Proc. Amer. Math. Soc.*, to appear. http://arxiv.org/abs/math.FA/0511399
161. (with L.W. Baggett, K.D. Merrill, and J.A. Packer) A non-MRA C^r-frame wavelet with rapid decay, *Acta Appl. Math.* **89** (2006), 251–270.
    http://arxiv.org/abs/math.CA/0504394
160. (with D.E. Dutkay) Hilbert spaces built on a similarity and on dynamical renormalization, *J. Math. Phys.* **47** (2006), no. 5, 20 pp. doi:10.1063/1.2196750
    http://arxiv.org/abs/math.DS/0503343
159. (with D.E. Dutkay) Harmonic analysis and dynamics for affine iterated function systems (TEX manuscript, 26 pages), *Houston J. Math.*, to appear.
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158. (with D.E. Dutkay) Methods from multiscale theory and wavelets applied to non-linear dynamics, *Wavelets, Multiscale Systems and Hypercomplex Analysis* (D. Alpay, ed.), Oper. Theory Adv. Appl., vol. 167, Birkhäuser, Boston, 2006, pp. 87–126. http://arxiv.org/abs/math.DS/0411371

157. (with D.E. Dutkay) Wavelet constructions in non-linear dynamics, *Electron. Res. Announc. Amer. Math. Soc.* **11** (2005), 21–33. http://arxiv.org/abs/math.DS/0501145

156. (with D.E. Dutkay) Iterated function systems, Ruelle operators, and invariant projective measures, *Math. Comp.* **75** (2006), 1931–1970. PII: S 0025-5718(06)01861-8 http://arxiv.org/abs/math.DS/0501077

155. (with D.E. Dutkay) Disintegration of projective measures, *Proc. Amer. Math. Soc.*, posted online June 22, 2006. PII: S 0002-9939(06)08469-3 http://arxiv.org/abs/math.CA/0408151

154. (with D.E. Dutkay) Hilbert spaces of martingales supporting certain substitution-dynamical systems, *Conform. Geom. Dyn.* **9** (2005), 24–45. M.R. 2006a:37005 [Baruch Solel]. http://arxiv.org/abs/math.CA/0407517

153. (with D.E. Dutkay) Martingales, endomorphisms, and covariant systems of operators in Hilbert space (TeX manuscript, 44 pages), *J. Operator Theory*, to appear (accepted November 2005, publication expected 2007). http://arXiv.org/abs/math.CA/0407330

152. Duality principles in analysis, *Wavelets and frames* (Oberwolfach mini-workshop, Feb. 15–21, 2004), Report no. 10/1004, Mathematisches Forschungsinstitut Oberwolfach, Germany, 2004, pp. 509–510.

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