

## Romuald Lenczewski

### Publications

- [1] R. Lenczewski, R. Sałapata, “Noncommutative Brownian motions associated with Kesten distributions and related Poisson processes”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.* Vol. 11, No. 3 (2008), 1-25.
- [2] R. Lenczewski, “Operators related to subordination for free multiplicative convolutions” *Indiana Univ. Math. J.*, Vol. 57, No. 3 (2008), 1055-1103.
- [3] L. Accardi, R. Lenczewski, R. Sałapata, “Decompositions of the free product of graphs”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, Vol. 10, No. 3 (2007), 303-334.
- [4] R. Lenczewski, “Decompositions of the free additive convolution”, *J. Funct. Anal.*, Vol. 246 (2007), 330-365.
- [5] R. Lenczewski, R. Sałapata, “Discrete interpolation between monotone probability and free probability”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, Vol. 9, No. 1 (2006), 77-106.
- [6] R. Lenczewski, “On noncommutative independence”, in *QP-PQ: Quantum Probability and White Noise Analysis. Vol. XVIII. Quantum Probability and Infinite Dimensional Analysis*, Eds. M. Schürmann, U. Franz, World Scientific, 2005, 320-336.
- [7] R. Lenczewski, “Reduction of free independence to tensor independence”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, Vol. 7, No. 3 (2004), 337-360.
- [8] R. Lenczewski, “Noncommutative extensions of the Fourier transform and its logarithm”, *Studia Math.*, Vol. 152 (2002), 69-101.
- [9] R. Lenczewski, “Filtered stochastic calculus”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, Vol. 4, No. 3 (2001), 309-346.
- [10] R. Lenczewski, “Filtered random variables, bialgebras and convolutions”, *J. Math. Phys.*, Vol. 42 (2001), 5876-5903.
- [11] R. Lenczewski, “Filtered probability”, in: Proceedings of the XX International Seminar on Stability Problems for Stochastic Models”, Lublin-Naęczów, 2001.
- [12] U. Franz, R. Lenczewski, “Limit theorems for the hierarchy of freeness”, *Probab. Math. Stat.*, Vol. 19 (1999), 23-41.
- [13] U. Franz, R. Lenczewski, M. Schürmann, “The GNS construction for the hierarchy of freeness”, Preprint No. 9/98, Wrocław University of Technology, Wrocław, 1998.
- [14] R. Lenczewski, “Unification of independence in quantum probability”, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, Vol. 1, No. 3 (1998), 383-405.
- [15] R. Lenczewski, “Tensor product construction of 2-freeness”, w *Quantum Probability*, Ed. R. Alicki *et al*, Banach Center Publications, Vol. 43 (1998), 259-272.
- [16] R. Lenczewski, “A noncommutative limit theorem for homogenous correlations”, *Studia Math.*, Vol. 129 (1998), 225-252.
- [17] R. Lenczewski, “Quantum random walk for  $U_q(su(2))$  and a new example of quantum noise”, *J. Math. Phys.*, Vol. 37 (1996), 2260-2278.

- [18] R. Lenczewski, "On certain states on free  $*$ -algebras and their GNS representations", *J. Math. Phys.*, Vol. 36 (1995), 3836-3853.
- [19] R. Lenczewski, "Quantum central limit theorems", w *Symmetries in Science VIII*, Ed. B.Gruber, Plenum, New York, 299-314 (1995).
- [20] R. Lenczewski, "Addition of independent variables in quantum groups", *Rev. Math. Phys.*, Vol. 6 (1994), 135-147.
- [21] R. Lenczewski, "On sums of  $q$ -independent  $SU_q(2)$  quantum variables", *Commun. Math. Phys.*, Vol. 154 (1993), 127-134.
- [22] R. Lenczewski, "A  $q$ -analog of the quantum central limit theorem for  $SU_q(2)$ ,  $q$  complex", *J. Math. Phys.*, Vol. 34 (1993), 480-489.
- [23] R. Lenczewski, K. Podgórski, "A  $q$ -analog of the quantum central limit theorem for  $SU_q(2)$ ", *J. Math. Phys.*, Vol. 33 (1992), 2768-2778.
- [24] R. Grimmer, R. Lenczewski, W. Schappacher, "Well-posedness of hyperbolic equations with delay in the boundary conditions", in *Semigroup Theory and Applications*, Ed. Ph.Clément *et al*, Marcel Dekker, New York, 215-230 (1989).
- [25] R. Lenczewski, "On certain submodules of the enveloping fields", in *Symmetries in Science V*, Ed. B.Gruber *et al*, Plenum Press, New York, 447-451 (1991).
- [26] B. Gruber, R. Lenczewski, M. Lorente, "On induced scalar product and unitarization", *J. Math. Phys.*, Vol. 31 (1990), 587-593.
- [27] R. Lenczewski, "Indecomposable modules of the Poincaré algebra in an energy-cyclic angular momentum basis", *J. Math. Phys.*, Vol.28 (1987), 1237-1242.
- [28] B. Gruber, R. Lenczewski, "Finite-dimensional indecomposable representations of the Poincaré algebra", w *Symmetries in Science II*, Ed. B.Gruber *et al*, Plenum Press, New York, 185-196 (1986).
- [29] R. Lenczewski, B. Gruber, "Indecomposable representations of the Poincaré algebra" *J. Phys. A*, Vol. 19 (1986), 1-20.
- [30] R. Lenczewski, B. Gruber, "Representations of the Lorentz algebra on the space of its universal enveloping algebra", *Lecture Notes in Phys.*, Vol. 261 (1986), 280-290.
- [31] B. Gruber, R. Lenczewski, "Indecomposable representations of the Lorentz algebra in an angular momentum basis", *J. Phys. A*, Vol. 16 (1983), 3703-3722.