

#### Submitted for publication

- Echterhoff Siegfried; Nest, Ryszard; Oyono-Oyono, Herve; *An analogue of Serre fibration for  $C^*$ -algebra bundles*
- Kaad, Jens; Nest, Ryszard; Rennie, Adam; *KK-theory and Spectral Flow in von Neumann Algebras.*
- Meyer, Ralf; Nest, Ryszard; *Homological algebra in bivariant K-theory and other triangulated categories.*
- Paul Bressler Poul, Gorokhovsky Alexander, Nest Ryszard, Tsygan Boris; *Deformations of Azumaya algebras.*

#### Published articles

- Paul Bressler Poul, Gorokhovsky Alexander, Nest Ryszard, Tsygan Boris; *Deformation quantization of gerbes* Adv. in Math. 2007
- Meyer, Ralf; Nest, Ryszard; *An analogue of the Baum-Connes isomorphism for coactions of compact groups.* Math. Scand 100 (2007), no. 2, 301--316.
- Aastrup, Johannes; Nest, Ryszard; Schrohe, Elmar; *A continuous field of  $C^*$ -algebras and the tangent groupoid for manifolds with boundary.* J. Funct. Anal. 237 (2006), no. 2, 482--506.
- Meyer, Ralf; Nest, Ryszard; *The Baum-Connes conjecture via localisation of categories.* Topology 45 (2006), no. 2, 209--259.
- Nest, Ryszard; Tsygan, Boris; *Remarks on modules over deformation quantization algebras.* Mosc. Math. J. 4 (2004), no. 4, 911--940, 982.
- Meyer, Ralf; Nest, Ryszard; *The Baum-Connes conjecture via localization of categories.* Lett. Math. Phys. 69 (2004), 237--263.
- Natsume, Toshikazu; Nest, Ryszard; Peter, Ingo *Strict quantizations of symplectic manifolds.* Lett. Math. Phys. 66 (2003), no. 1-2, 73--89.
- Melo, Severino T.; Nest, Ryszard; Schrohe, Elmar *K-theory of Boutet de Monvel's algebra.* Noncommutative geometry and quantum groups (Warsaw, 2001), 149--156, Banach Center Publ., 61, Polish Acad. Sci., Warsaw, 2003.
- Chabert, Jérôme; Echterhoff, Siegfried; Nest, Ryszard *The Connes-Kasparov conjecture for almost connected groups and for linear  $p$ -adic groups.* Publ. Math. Inst. Hautes Études Sci. No. 97 (2003), 239--278.
- Melo, S. T.; Nest, R.; Schrohe, E.  *$C^*$ -structure and K-theory of Boutet de Monvel's algebra.* J. Reine Angew. Math. 561 (2003), 145--175.
- Durhuus, Bergfinnur; Jonsson, Thordur; Nest, Ryszard *The existence and stability of noncommutative scalar solitons.* Comm. Math. Phys. 233 (2003), no. 1, 49--78.

- Nest, Ryszard; Vogt, Elmar; Werner, Wend *Spectral action and the Connes-Chamseddine model. Noncommutative geometry and the standard model of elementary particle physics* (Hesselberg, 1999), 109--132, Lecture Notes in Phys., 596, Springer, Berlin, 2002.
- Bressler, P.; Nest, R.; Tsygan, B. *Riemann-Roch theorems via deformation quantization. I, II*. Adv. Math. 167 (2002), no. 1, 1--25, 26--73.
- Nest, Ryszard; Tsygan, Boris *Deformations of symplectic Lie algebroids, deformations of holomorphic symplectic structures, and index theorems*. Asian J. Math. 5 (2001), no. 4, 599--635. (Reviewer: Martin Schlichenmaier)
- Leichtnam, Eric; Nest, Ryszard; Tsygan, Boris *Local formula for the index of a Fourier integral operator*. J. Differential Geom. 59 (2001), no. 2, 269--300.
- Echterhoff, Siegfried; Nest, Ryszard *The structure of the Brauer group and crossed products of  $O(X)$ -linear group actions on  $O(X, K)$* . Trans. Amer. Math. Soc. 353 (2001), no. 9, 3685--3712 (electronic).
- Durhuus, Bergfinnur; Jonsson, Thordur; Nest, Ryszard *Noncommutative scalar solitons: existence and nonexistence*. Phys. Lett. B 500 (2001), no. 3-4, 320--325.
- Nest, Ryszard; Radulescu, Florin *Index of  $\Gamma$ -equivariant Toeplitz operators.  $C^*$ -algebras* (Münster, 1999), 151--160, Springer, Berlin, 2000.
- Natsume, Toshikazu; Nest, Ryszard *Topological approach to quantum surfaces*. Comm. Math. Phys. 202 (1999), no. 1, 65--87.
- Nest, Ryszard; Tsygan, Boris *On the cohomology ring of an algebra*. Advances in geometry, 337--370, Progr. Math., 172, Birkhäuser Boston, Boston, MA, 1999.
- Nest, Ryszard; Schrohe, Elmar *Dixmier's trace for boundary value problems*. Manuscripta Math. 96 (1998), no. 2, 203--218.
- Nest, Ryszard; Tsygan, Boris *Product structures in (cyclic) homology and their applications*. Operator algebras and quantum field theory (Rome, 1996), 416--439, Int. Press, Cambridge, MA, 1997.
- Bressler, P.; Nest, R.; Tsygan, B. *A Riemann-Roch type formula for the microlocal Euler class*. Internat. Math. Res. Notices 1997, no. 20, 1033--1044.
- Nest, Ryszard; Tsygan, Boris *The Fukaya type categories for associative algebras*. Deformation theory and symplectic geometry (Ascona, 1996), 285--300, Math. Phys. Stud., 20, Kluwer Acad. Publ., Dordrecht, 1997.
- Elliott, George A.; Natsume, Toshikazu; Nest, Ryszard *The Atiyah-Singer index theorem as passage to the classical limit in quantum mechanics*. Comm. Math. Phys. 182 (1996), no. 3, 505--533.
- Nest, Ryszard; Tsygan, Boris *Formal deformations of symplectic manifolds with boundary*. J. Reine Angew. Math. 481 (1996), 27--54.
- Nest, Ryszard; Tsygan, Boris *Formal versus analytic index theorems*. Internat. Math. Res. Notices 1996, no. 11, 557--564.

- Enock, Michel; Nest, Ryszard *Irreducible inclusions of factors, multiplicative unitaries, and Kac algebras*. J. Funct. Anal. 137 (1996), no. 2, 466--543.
- Nest, Ryszard; Tsygan, Boris *Algebraic index theorem*. Comm. Math. Phys. 172 (1995), no. 2, 223--262.
- Nest, Ryszard; Tsygan, Boris *Algebraic index theorem for families*. Adv. Math. 113 (1995), no. 2, 151--205.
- Natsume, T.; Nest, R. *The local structure of the cyclic cohomology of Heisenberg Lie groups*. J. Funct. Anal. 119 (1994), no. 2, 481--498.
- Elliott, George A.; Natsume, Toshikazu; Nest, Ryszard *The Heisenberg group and  $KK$ -theory*.  $KK$ -Theory 7 (1993), no. 5, 409--428.
- Durhuus, Bergfinnur; Jakobsen, Hans Plesner; Nest, Ryszard *Topological quantum field theories from generalized  $6j$ -symbols*. Rev. Math. Phys. 5 (1993), no. 1, 1--67.
- Durhuus, Bergfinnur; Jakobsen, Hans P.; Nest, Ryszard *Topological field theories from quantum  $6j$ -symbols*. Topological and geometrical methods in field theory (Turku, 1991), 121--134, World Sci. Publ., River Edge, NJ, 1992.
- Durhuus, B.; Jakobsen, Hans P.; Nest, R. *A construction of topological quantum field theories from  $6j$ -symbols*. Random surfaces and 2D quantum gravity (Barcelona, 1991). Nuclear Phys. B Proc. Suppl. 25A (1992), 109--121.
- Elliott, George A.; Nest, Ryszard; Rørdam, Mikael *The cyclic homology of algebras with adjoined unit*. Proc. Amer. Math. Soc. 113 (1991), no. 2, 389--395.
- Natsume, Toshikazu; Nest, Ryszard *The cyclic cohomology of compact Lie groups and the direct sum formula*. J. Operator Theory 23 (1990), no. 1, 43--50.
- Nest, Ryszard *Cyclic cohomology of noncommutative tori*. Canad. J. Math. 40 (1988), no. 5, 1046--1057.
- Nest, Ryszard *Cyclic cohomology of crossed products with  $\mathbb{Z}$* . J. Funct. Anal. 80 (1988), no. 2, 235--283.
- Elliott, G. A.; Natsume, T.; Nest, R. *Cyclic cohomology for one-parameter smooth crossed products*. Acta Math. 160 (1988), no. 3-4, 285--305.
- Brenken, Berndt; Cuntz, Joachim; Elliott, George A.; Nest, Ryszard *On the classification of noncommutative tori. III*. Operator algebras and mathematical physics (Iowa City, Iowa, 1985), 503--526, Contemp. Math., 62, Amer. Math. Soc., Providence, RI, 1987.
- Prance H, Spiller TP, Mutton JE, et al. *QUANTUM-MECHANICAL FLUX BAND DYNAMICS OF A SUPERCONDUCTING WEAK LINK CONSTRICTION RING* PHYSICS LETTERS A 115 (3): 125-131 MAR 31 1986
- Prance RJ, Clark TD, MuttonN JE, et al. *LOCALIZATION OF PAIR CHARGE STATES IN A SUPERCONDUCTING WEAK LINK*

CONstriction RING. PHYSICS LETTERS A 107 (3): 133-138 1985

- Prance H, Prance RJ, Spiller TP, et al.  
*CHARGE BAND BEHAVIOR IN A SUPERCONDUCTING WEAK LINK DRIVEN BY A NORMAL FARADAY LAW VOLTAGE SOURCE*  
PHYSICS LETTERS A 111 (4): 199-204 1985
- Drukier, A.K., Nest, Ryszard; *On the possibility of detecting solar neutrinos with an IN-115 detector.* NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 239 (3): 605-622 1985