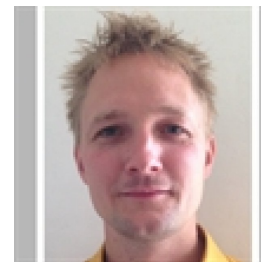


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Employment

Associate Professor

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University of Southern Denmark
Odense M
1. Feb 2016 → present

Associate Professor

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Grants

DFF-Research Project 1, Three years research grant, Principal Investigator: David Kyed, Project: *Classical and Quantum Distances*. September 2019-September 2022.

DFF-Research Project 2, Four years research grant, Principal Investigator: Wojciech Szymanski, Project: *Automorphisms and Invariants of Operator Algebras*. August 2017-August 2021.

Carlsberg Foundation, One year research stipend for Paris VII, Project: *Controlled K-homology*. September 2011-September 2012.

Research outputs

The Podles spheres converge to the sphere

Aguilar, K., Kaad, J. & Kyed, D., 25. Feb 2021, In: arxiv.org.

Gromov-Hausdorff convergence of quantised intervals

Kyed, D., Kaad, J. & Gotfredsen, T., 2021, (Accepted/In press) In: *Journal of Mathematical Analysis and Applications*. To appear, 12 p.

Tate tame symbol and the joint torsion of commuting operators

Kaad, J. & Nest, R., 20. Jun 2020, In: *Annals of K-Theory*. 5, 2, p. 181-211

Dynamics of compact quantum metric spaces

Kaad, J. & Kyed, D., 11. May 2020, In: *Ergodic Theory and Dynamical Systems*.

Factorization of Dirac Operators on Almost-Regular Fibrations of Spin^c Manifolds

Kaad, J. & Suijlekom, W. D. V., 2020, In: *Documenta Mathematica*. 25, p. 2049-2084

On the unbounded picture of kk -theory

Kaad, J., 2020, In: *Symmetry, Integrability and Geometry: Methods and Applications*. 16, 21 p., 082.

On a theorem of Kucerovsky for half-closed chains

Kaad, J. & Van Suijlekom, W. D., Jun 2019, In: Journal of Operator Theory. 82, 1, p. 115-145 31 p.

Canonical holomorphic sections of determinant line bundles

Kaad, J. & Nest, R., 2019, In: Journal für die reine und angewandte Mathematik. 746, p. 67-116 50 p.

The Podleś sphere as a spectral metric space

Aguilar, K. & Kaad, J., Nov 2018, In: Journal of Geometry and Physics. 133, p. 260-278

Algebraic K-theory and a semifinite Fuglede-Kadison determinant

Hochs, P., Kaad, J. & Schemaitat, A., Mar 2018, In: Annals of K-Theory. 3, 2, p. 193-206

Riemannian submersions and factorization of Dirac operators

Kaad, J. & van Suijlekom, W. D., 1. Jan 2018, In: Journal of Noncommutative Geometry. 12, 3, p. 1133-1159 27 p.

Factorization of Dirac operators on toric noncommutative manifolds

Kaad, J. & van Suijlekom, W. D., 2018, In: Journal of Geometry and Physics. 132, p. 282-300

On the Global Limiting Absorption Principle for Massless Dirac Operators

Carey, A., Gesztesy, F., Kaad, J., Levitina, G., Nichols, R., Potapov, D. & Sukochev, F., 2018, In: Annales Henri Poincare. 19, 7, p. 1993-2019

Operator *-correspondences in analysis and geometry

Blecher, D., Kaad, J. & Mesland, B., 2018, In: Proceedings of the London Mathematical Society. 117, 2, p. 303-344

Corrigendum to "A local global principle for regular operators in Hilbert C-modules" [J. Funct. Anal. 262 (10) (2012) 4540-4569]

Kaad, J. & Lesch, M., 2017, In: Journal of Functional Analysis. 272, 10, p. 4403-4406

Differentiable absorption of Hilbert C*-modules, connections and lifts of unbounded operators

Kaad, J., 2017, In: Journal of Noncommutative Geometry. 11, 3, p. 1037-1068

Topological invariance of the homological index

Carey, A. & Kaad, J., 2017, In: Journal fuer die Reine und Angewandte Mathematik. 2017, 729, p. 229-261

On a spectral flow formula for the homological index

Carey, A., Grosse, H. & Kaad, J., 2016, In: Advances in Mathematics. 289, p. 1106-1156

Pimsner algebras and Gysin sequences from principal circle actions

Arici, F., Kaad, J. & Landi, G., 2016, In: Journal of Noncommutative Geometry. 10, 1, p. 29-64

A transformation rule for the index of commuting operators

Kaad, J. & Nest, R., 2015, In: Journal of Noncommutative Geometry. 9, 1, p. 83-119

Anomalies of Dirac type operators on Euclidean space

Carey, A., Grosse, H. & Kaad, J., 2015, In: Communications in Mathematical Physics. 335, 1, p. 445-475

A Serre-Swan theorem for bundles of bounded geometry

Kaad, J., 2013, In: Journal of Functional Analysis. 265, 10, p. 2465-2499 35 p.

Spectral flow and the unbounded Kasparov product

Kaad, J. & Lesch, M., 2013, In: Advances in Mathematics. 248, p. 495-530 36 p.

A local global principle for regular operators in Hilbert C^* -modules

Kaad, J. & Lesch, M., 2012, In: *Journal of Functional Analysis*. 262, 10, p. 4540-4569 30 p.

A twisted spectral triple for quantum $SU(2)$

Kaad, J. & Senior, R., 2012, In: *Journal of Geometry and Physics*. 62, 4, p. 731-739

Joint torsion of several commuting operators

Kaad, J., 2012, In: *Advances in Mathematics*. 229, 1, p. 442-486

KK-theory and spectral flow in von Neumann algebras

Kaad, J., Nest, R. & Rennie, A., 2012, In: *Journal of K-Theory*. 10, 2, p. 241-277

A calculation of the multiplicative character

Kaad, J., 2011, In: *Journal of Noncommutative Geometry*. 5, 3, p. 351-385

Comparison of secondary invariants of algebraic K-theory

Kaad, J., 2011, In: *Journal of K-Theory*. 8, 1, p. 169-182

Organization of workshops and conferences

Mathematisches Forschungsinstitut Oberwolfach, Germany, Mini-Workshop: *Operator spaces and Noncommutative geometry in interaction*, February 2016.

Radboud University Nijmegen, The Netherlands, Workshop: *KK-days*, April 2015 and November 2015.

Invited talks (2016-2019)

- **Operator algebra seminar**, *University of Southern Denmark, Odense*, March 2019.
- **SFB-lecture, Higher-Invariants**, *Universität Regensburg, Regensburg*, January 2019.
- **Masterclass on Bivariant K-theory in Geometry and Physics**, *Erwin Schrödinger Institute, Vienna*, November 2018.
- **QGM Seminar**, *Center for Quantum Geometry of Moduli Spaces, Aarhus*, September 2018.
- **Workshop on Noncommutative Geometry, Index Theory and Mathematical Physics**, *Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach*, July 2018.
- **27th International Conference on Operator Theory**, *Institute of Mathematics Simion Stoilow of the Romanian Academy, Timisoara*, June 2018.
- **Workshop on Secondary and delocalized index invariants**, *University of Copenhagen, Copenhagen*, June 2018.
- **Colloquium on Geometry and Quantum Theory**, *Utrecht University, Nijmegen*, May 2018.
- **Danish Operator Algebra Symposium**, *University of Southern Denmark, Odense*, May 2018.
- **Conference on New Geometry of Quantum Dynamics**, *Banach center, Warsaw*, January 2018.
- **Oberseminar "Global Analysis and Operator Algebras"**, *University of Bonn, Bonn*, January 2018.
- **Séminaire d'Algèbres d'Opérateurs**, *Institut de Mathématiques de Jussieu, Université de Paris VII, Paris*, October 2017.
- **Operator algebra seminar**, *University of Southern Denmark, Odense*, October 2017.
- **Workshop on Analysis, Noncommutative Geometry, Operator Algebras**, *Chalmers, Gothenburg*, May 2017.
- **Great Plains Operator Theory Symposium (GPOTS)**, *Texas Christian University, Fort Worth*, May 2017.
- **Workshop on KK-theory, Gauge theory and Topological phases**, *Lorentz center, Leiden*, March 2017.
- **Operator algebra seminar**, *University of Southern Denmark, Odense*, November 2016.
- **Conference on Noncommutative Index Theory**, *Banach center, Warsaw*, October 2016.
- **Masterclass in sums of selfadjoint operators: Kasparov products and applications**, *University of Copenhagen, Copenhagen*, July 2016.
- **Workshop on Spectral Triples in Noncommutative Geometry**, *Villa Toeplitz, Varese*, May 2016.
- **Conference on Gauge Theory and Noncommutative Geometry**, *Radboud university, Nijmegen*, April 2016.
- **Quantum gravity seminar**, *Radboud University, Nijmegen*, January 2016.