

Adam Skalski

Date of birth 31 January 1978

Address Institute of Mathematics of the Polish Academy of Sciences
ul. Śniadeckich 8
00-656 Warszawa, Poland

Current position Full Professor, Institute of Mathematics of the Polish Academy of Sciences
Deputy Director for scientific matters
Chairman of ERCOM (European Research Centres in the Mathematical Sciences)

Previous positions

2012-2015 Associate Professor, joint position between the Institute of Mathematics of the Polish Academy of Sciences and the University of Warsaw

2014 (X-XII) Professeur Invité, CNRS, Université Franche-Comté, Besançon (X-XII 2014)

2010-2012 Marie Curie Intra-European Fellowship: 'Probability on Quantum Groups', Institute of Mathematics, Polish Academy of Sciences, Warsaw

2007-2010 EPSRC Postdoctoral Fellow, Lancaster University

2009 JSPS Postdoctoral Fellow, University of Tokyo (1 October - 30 November)

2006 - 2007 EPSRC Research Fellow, University of Nottingham (1 August - 31 July)

2006 Research Associate, Lancaster University (1 January - 31 July)

2004 - 2005 PhD student, University of Nottingham

2000 - 2004 Assistant Pre-Doc, University of Łódź.

Degrees

2019 Professor of Mathematics (Polish scientific title)

2013 Habilitation in Mathematics with distinction, Institute of Mathematics of the Polish Academy of Sciences. Thesis: *Certain approximation properties of C^* -algebras and the noncommutative Voiculescu entropy of their endomorphisms*. Reviewers: Professor Stanisław Goldstein, Professor Romuald Lenczewski, Professor Stanisław Lech Woronowicz

2006 PhD in Mathematics, University of Nottingham. Doctoral Thesis: *Quantum Stochastic Convolution Cocycles*. Registration, 2004-2005; Submission, December 2005; Viva, July 2006. Supervisor: Professor J.M. Lindsay.
External examiner: Professor Ph. Biane (École Normale Superior, Paris).

2002 MSc in Physics, University of Lodz. Masters Dissertation: Applications of Tomita-Takesaki Theory in Algebraic Quantum Field Theory
Average mark over all exams (1996-2002): 4.92, Medal for Distinguished Studies.

2000 MSc in Mathematics, University of Lodz. Masters Dissertation: *Completely Positive Mappings and Dilation Theorems*.
Average mark over all exams (1995-2000):4.98, Medal for Distinguished Studies.

Awards and Prizes

2014	Sierpiński Prize (awarded by the III Department of the Polish Academy of Sciences)
2008	Kuratowski Prize (awarded by the Polish Academy of Sciences and Polish Mathematical Society)
2005	Polish Mathematical Society Prize for Young Mathematicians
2005	University of Nottingham Postgraduate Prize (Andrew Hendry Scholarship)

Research funding

2022-2024	National Science Centre Opus-LAP Grant “Quantum groups, graphs and symmetries via the representation theory” (Project Leader)
2019-2022	PAN-FWO Polish-Flemish Collaboration project “von Neumann algebras arising from quantum symmetries (Project Leader – Polish side)
2015-2022	National Science Centre Grant “Geometric, probabilistic and analytic theory of topological quantum groups and its interaction with operator algebras” (Project Leader)
2013-2015	Polish Ministry of Science Grant Iuventus Plus “Towards Geometric Quantum Group Theory” (Project Leader)
2013	Joint London Mathematical Society, Warsaw Center for Mathematical Sciences, Lancaster University and Leeds University grant for the network ‘Quantum groups, operators and non-commutative probability’ (Project Leader on the Warsaw side) http://www.maths.lancs.ac.uk/qop/
2012-2014	National Science Centre Grant “Coefficients of cyclic homology and noncommutative geometry of C^* -algebras and Dirac operators” (Investigator)
2011-2014	Scholarship for outstanding young scientists (Polish Ministry of Science)
2011-2014	National Science Centre Grant “Topological quantum groups and quantum families of mappings” (Principal Investigator)
2010-2012	Marie Curie Postdoctoral Fellowship (Warsaw, Polish Academy of Sciences)
2009	JSPS Short-Term Postdoctoral Fellowship
2007-2010	EPSRC Postdoctoral Fellowship
2004-2005	Overseas Research Scholarship (covering the tuition fees for a PhD student from outside the EU)
2003-2005	Research Grant Noncommutative L_p -spaces (with S. Goldstein and A. Łuczak), funded by the Polish Committee of Scientific Research.
2002	Scholarship from the Polish Academy of Sciences for outstanding young pre-doctoral mathematicians.
1997-2000	Scholarship from the Polish Ministry of Sport and Education for outstanding achievements in undergraduate studies.

Functions and memberships

- Deputy Director of IMPAN for scientific matters, responsible for Banach Center (since 2015)
- Chairman of ERCOM, European Research Centres in the Mathematical Sciences (2021-2024)

- Member of the Council of the European Mathematical Society (representing the Banach Center, since 2022)
- Member of the Warsaw Scientific Society (since 2021)
- Elected member of the Committee of Mathematics of the Polish Academy of Sciences (member of the Presidium, representative of Poland for the contacts with the International Mathematical Union)
- Member of the Programme Committee of the International Centre for Mathematical Sciences, Edinburgh.
- Executive Editor, *Studia Mathematica* (since 2015)
- Executive Editor, Banach Center Publications (since 2019)
- Editor, *Dissertationes Mathematicae* (since 2020)
- Editor, *Infinite Dimensional Analysis, Quantum Probability and Related Topics* (since 2021)
- Editor, *Dissertationes Mathematicae* (since 2021)
- Subject Editor (Analysis) *Glasgow Mathematical Journal* (2014-2021)
- Member of the Jury of the Kuratowski Prize designated by the Polish Mathematical Society in 2009-2012 (chairman of the Jury in 2012), and again from 2018 (as a representative of IMPAN)
- Member of the Jury of the Sierpiński Medal (2017-2019) designated by the Polish Mathematical Society, chairman in 2019
- Member of the Jury of the Zemanek Prize (2018-2024),
- Co-edited the Banach Center Publications volume 'Quantum Dynamics', 2020 (jointly with Ludwik Dąbrowski and Ryszard Nest)
- Co-organizer (jointly with Martijn Caspers and Lyudmila Turovska) of the 'Noncommutative harmonic analysis and quantum information', Institute Mittag-Leffler, June 2023.
- Co-organizer (jointly with Kenny De Commer) of the 'Noncommutative harmonic analysis and quantum groups', Będlewo, September 2022.
- Co-organizer (jointly with Masaki Izumi, Sergey Neshveyev and Dmitriy Nikshych) of the 'Quantum Groups - Algebra, Analysis and Category Theory', Oberwolfach, September 2021.
- Co-organizer (jointly with Martijn Caspers and Eric Ricard) of the 'Quantum Probability and Non-Commutative Harmonic Analysis', Lorentz Center, Leiden, November 2021.
- Co-organizer (jointly with Bartosz Kwaśniewski) of the 'Cartan C^* -Subalgebras and Noncommutative Dynamics', Warsaw, November 2019.
- Co-organizer (jointly with Yongle Jiang and Piotr Nowak) of the 'Maximal subgroups and (operator) subalgebras', Warsaw, September 2019.
- Co-organizer (jointly with Massoud Amini and Mehrdad Kalantar) of the 'The 6th Workshop on Operator Algebras and its Application' in the IPM Teheran, January 2019
- Co-organizer (jointly with Steffan Kolb, Ulrich Kräehmer and Christian Voigt) of the 'Quantum Homogeneous Spaces' conference in the International Centre for Mathematical Sciences, Edinburgh, June 2018
- Co-organizer (jointly with Benoit Collins, Hun Hee Lee and Uwe Franz) of the 'Topological quantum groups and harmonic analysis' conference in Seoul National University, May 2017
- Co-organizer (jointly with Kenny De Commer, Piotr Hajac and Réamonn O'Buachalla) of the 'Topological quantum groups and Hopf algebras' conference in Warsaw, November 2016
- Co-organizer (jointly with Moritz Weber, Uwe Franz and Malte Gerhold) of the 7ECM Satellite Conference Compact Quantum Groups in Greifswald, June 2016
- Main organiser (jointly with Uwe Franz and Piotr Sołtan) of the Graduate School 'Topological Quantum Groups' in Będlewo, July 2015 (<http://bcc.impan.pl/15TQG/>)
- Polish Coordinator of the QOP network joining Lancaster University, Leeds University and IMPAN, <http://www.maths.lancs.ac.uk/qop/>, 2013-2015
- Main organiser of the meeting 'C*-algebras and Banach algebras' in Warsaw in July 2013,

<http://bcc.impan.pl/13Calgebras/>

- Main organiser of the meeting 'Quantum Probability, Groups and Geometry' in Warsaw in April 2015, <http://bcc.impan.pl/15QPGG/>
- Organiser (jointly with Baruch Solel) of the section 'Banach Center Operator Algebras' during the Joint Israeli- Polish Mathematical Meeting in Łódź in September 2011, <http://imuptm.math.uni.lodz.pl/>
- Member of the Programme Committee for the Polish Mathematical Forum 2015
- Member of the Scientific Council of IMPAN (since 2014)
- Member of the Hiring Committee at IMPAN (since 2014)
- Member of the Hiring Committee at the Department of Mathematics, Informatics and Mechanics of the University of Warsaw (2018-2020)
- Member of the PhD studies and the Conference Funding committees of the Warsaw Center for Mathematical Sciences (2012-2015)
- Member of the American Mathematical Society since 2006 and of the Polish Mathematical Society since 2010
- Co-organiser of the Departmental Seminar in the Department of Mathematics and Statistics, Lancaster University (2007-2010)
- Co-organiser of the Young Researchers Colloquium at IMPAN, Warsaw (academic year 2012/2013)
- MathSciNet and Zentralblatt reviewer
- Reviewed research articles submitted to Acta Scientiarum Mathematicarum, Advances in Mathematical Physics, Advances in Mathematics (*), Advances in Operator Theory, Algebras and Representation Theory, Annales de l'Institut Fourier, Annales Henri Poincaré (*), Annales Mathematiques Blaise Pascal, Annales Polonici Mathematici, Annals of Functional Analysis, Banach Center Publications (*), Banach Journal of Mathematical Analysis (*), Bulletin of the Korean Mathematical Society, Bulletin of the London Mathematical Society (*), Bulletin of the Polish Academy of Sciences: Mathematics, Colloquium Mathematicum (*), Communications in Mathematical Physics (*), Communications on Stochastic Analysis (*), Crelle Journal (*), Dissertationes Mathematicae (*), Documenta Mathematica, Ergodic Theory and Dynamical Systems (*), Functional Analysis and Applications, Fundamenta Mathematica (*), Geometric and Functional Analysis, Illinois Journal of Mathematics (*), Indiana University Mathematics Journal (*), Infinite Dimensional Analysis and Quantum Probability (*), International Journal of Mathematics (*), International Mathematics Research Notices (*), Israel Journal of Mathematics, Journal of Algebra (*), Journal of Applied Analysis (*), Journal of Functional Analysis (*), Journal of Geometry and Physics (*), Journal of Mathematical Analysis and Applications (*), Journal of Noncommutative Geometry (*), Journal of Operator Theory, Journal of Physics A, Journal of Pure and Applied Algebra, Journal of Statistical Physics, Journal of the Korean Mathematical Society, Journal of the Australian Mathematical Society, Journal of the London Mathematical Society (*), Journal of the Ramanujan Mathematical Society, Linear Algebra and Applications, Mathematica Slovaca, Mathematische Annalen, Mathematische Zeitschrift, Operator Theory and Applications, Positivity, Probability and Mathematical Statistics, Probability Theory and Related Fields, Proceedings of the Edinburgh Mathematical Society (*), Proceedings of the Indian Academy of Sciences: Mathematical Sciences, Proceedings of the London Mathematical Society (*), Proceedings of the Royal Society of Edinburgh: Section A, Publications of RIMS (*), Quarterly Journal of Mathematics (*), Representation Theory, SIGMA(*), Studia Mathematica (*), Transactions of the American Mathematical Society (*) and to QP—PQ: Quantum Probability, White Noise Analysis. (* = several times)
- Examiner of one professorship application in Poland and several abroad (Korea, Germany, China, USA, UK, Canada, India)
- Examiner of six habilitation theses, twice at the University of Wrocław (Poland), thrice at IMPAN (Poland) and once at the Université Bourgogne-Franche-Comte (France)
- Examiner of twelve PhD theses, at the University of Wollongong (Australia), KU Leuven (Belgium), the North-West University (South Africa), University of Oslo (Norway), SISSA (Trieste), the Université

Blaise Pascal (France), the Jagiellonian University (Poland), at the Indian Statistical Institute (India), the Saarland University (Germany), the Vrije Universiteit Brussel (Belgium), TU Delft (Netherlands) and at Texas A&M (USA).

- Worked for National Science Centre (Polish funding body) as an expert panelist in 2015 and in 2017.
- Member of the FWO Review College (since 2021) and of the FWO Expert panel on the PhD and postdoctoral fellowships (mathematical sciences) in 2022
- Refereed grant applications for FWF (Austrian agency), FWO (Flemish funding agency), ESF (European Science Foundation), NSERC (Canadian funding body), NAWA (Polish funding body for international visits), National Science Centre (Polish funding body), National Research Foundation (South Africa), Humboldt Foundation and European Research Council (Advanced ERC Grant application)

Supervision experience

- PhD student: Simeng Wang, 2013-2016, the thesis 'Some problems in harmonic analysis on quantum groups' defended with distinction and awarded Węcławek Prize of IMPAN
- PhD student: Mateusz Wasilewski, 2014 – 2018, the thesis 'On q-deformed von Neumann algebras', defended with distinction and awarded Węcławek Prize of IMPAN
- PhD student: Haonan Zhang, 2016-2019, the thesis 'Some problems in non-commutative analysis', defended with distinction and awarded Węcławek Prize of IMPAN
- Mentored postdocs: Jyotishman Bhowmick (2008), Biswarup Das (2014), Colin Mrozinski (2015), Mehrdad Kalantar (2015), Sam Evington (2017), Yongle Jiang (2018-2019, jointly), Leonard Cadilhac (2019-2020), Jorge Castillejos (2019-2021), Adrian Gonzalez-Perez (2020), Sugato Mukhopadhyay (2021-2023), Hua Wang (2022-2024), Manish Kumar (2022-2024)
- Interns (mentored visiting PhD students): Łukasz Garncarek (2013), Michał Banacki (2016), Fatemeh Khosravi (2016)

Teaching experience

- Semester lecture course 'Introduction to C^* -algebras II', University of Warsaw, 60 hours (lectures+tutorials)
- Semester lecture course 'Introduction to C^* -algebras', University of Warsaw, 60 hours (lectures+tutorials)
- Tutorials in Probability II and Geometry and Linear Algebra, University of Warsaw
- Informal lecture course for PhD students on C^* -algebras and compact quantum groups, Lancaster University
- Tutorials in Complex Analysis, Introduction to Mathematics, University of Nottingham
- Tutorials in Analysis II, Geometry and Linear Algebra, Functional Analysis, University of Łódź

Research visits

- 2022 (November) Visiting Researcher, University of Saarbrücken
- 2019 (November) Visiting Researcher, VUB (Brussels)
- 2018 (November) Visiting Researcher, TU Delft
- 2018 (April) Visiting Researcher, University of Haifa
- 2017 (October) Visiting Researcher, Universite Franche-Comte, Besancon
- 2016 (February) Visiting Researcher, Queen's University Belfast
- 2016 (January) Visiting Researcher, University of Saarbrücken

2015 (September) Visiting Researcher, University of Illinois, Urbana-Champaign

2015 (February) Visiting Researcher, University of Saarbrücken

2014 (June) Visiting Researcher, Oslo University

2013 (March) Visiting Researcher, Oslo University

2012 (August) Research in in Pairs visit in the Mathematical Institute in Oberwolfach (with M.Neufang, P.Salmi and N.Spronk)

2012 (July) Visiting Researcher at Universite Cergy-Pontoise (France)

2012 (June) Visiting Researcher at Leeds University (UK)

2012 (May) Visiting Researcher at University of Oulu (Finland)

2011 (July) Visiting Researcher at South-Denmark University (Odense, Denmark)

2011 (July) Visiting Researcher at Universite Cergy-Pontoise (France)

2011 (February) Visiting Researcher at Cheong-Ju University (Korea)

2010 (Dec.) Visiting Researcher at the University of Waterloo and the Fields Institute (Toronto)

2010 (May) Visiting Researcher at Leeds University, Special Semester on Banach algebra and operator space techniques in topological group theory

2010 (April) Visiting Researcher at Universite Cergy-Pontoise (France)

2009 (March) Research in Groups visit at University of Glasgow funded by the Edinburgh Institute of Mathematical Sciences (with S.White and J.Zacharias)

2008 (Sept.) Research in Pairs visit in the Mathematical Institute in Oberwolfach (with U.Franz, R.Gohm and R.Tomatsu)

2008 (May-June) Visiting Research Fellow at Indian Statistical Institute, Kolkata and Bangalore centres, funded by the UKIERI project Quantum Probability, Noncommutative Geometry and Quantum Information

2008 (April) Research in Pairs visit in the Mathematical Institute in Oberwolfach (with J.Zacharias)

2006 (Dec.) Visiting Research Fellow at Indian Statistical Institute, Bangalore.

2005 (October) & 2006 (May) Pre-doc at the University of Besancon, funded by the EU RTN Quantum Probability with Applications to Physics, Information Theory and Biology

2003 (February–July) Pre-doc at the University of Nottingham, funded by the EU RTN Quantum Probability with Applications to Physics, Information Theory and Biology

Invited lecture series

- Athens (Greece), July 2019
`Introduction to compact quantum groups' – part of the VII School on Geometry and Physics
- Białowieża (Poland), June 2018
`Quantum Dirichlet forms and their recent applications' – part of the VII School on Geometry and Physics
- Métabief (France), December 2014
`Quantum symmetry groups and related topics' – part of Winter School on Operator Spaces, Noncommutative Probability and Quantum Groups
- Teheran (Iran), January 2014
`On the Haagerup property and property T for locally compact classical and quantum groups' – part of the 2nd Seminar on Harmonic Analysis and Applications.
- Daejeon (Korea), August 2013

'Haagerup property for locally compact classical and quantum groups' – part of the 8th Jikji Workshop, Infinite Dimensional Analysis and Quantum Probability

- Bangalore (India), January 2013
'On noncommutative dynamical systems' – part of the graduate school Recent Advances in Operator Theory and Operator Algebras.
- Będlewo (Poland), May 2011
'On quantum dynamical systems from the noncommutative mathematics' perspective' – part of the Spring School on Dynamical Systems.
- Gyeong-Ju (Korea), February 2011
'Quantum Lévy processes on topological quantum groups' – part of the 3ILJU School of Mathematics, Banach Spaces and Related Topics.
- Leeds (UK), May 2010
'Universal quantum groups acting on classical and quantum spaces' – part of the Special Semester on Banach algebra and operator space techniques in topological group theory

Invited special talks

Greifswald, March 2015. Public lecture at Alfried Krupp Wissenschaftskolleg. 'What is a 'good''definition?'

Poznań, May 2012, Annual Lecture in memory of Wojtek Pulikowski. 'On quantum symmetry groups'

Main conferences attended, with talks given

Cabourg, November 2022. ANR 'Noncommutative analysis on groups and quantum groups' workshop. Invited talk: 'Classifying C^* -algebras with the K-theory: (Hecke) algebras associated with right-angled Coxeter groups'

Łódź, September 2022. Congress of the Young Polish Mathematicians. Invited talk: 'On quantum addition'.

TU Delft, September 2022. Workshop. Invited talk 'Maximal Haagerup subgroups and subalgebras'

Granada, August 2022. Banach Algebras. Invited talk: 'On q -Hecke operator algebras'

Oslo, May 2022. C^* -algebras and geometry of groups and semigroups. Invited talk: 'UCT, groupoids, and Haagerup trick and all that'

Gothenburg, February 2022. Noncommutativity in the North. Invited talk: 'Quantum Hecke algebras'

Greifswald, September 2021. Noncommutative algebra, probability and analysis in action. Invited talk: 'Gaussian states on quantum groups'

Oslo, April 2021. C^* -algebras and geometry of groups and semigroups. Invited talk: 'On K-theory of Hecke algebras of right-angled Coxeter groups'

CIRM Luminy, October 2020. Entangling Non-commutative Functional Analysis and Geometry of Banach Spaces. Invited talk: 'On certain Hecke algebras arising as deformations of group algebras of Coxeter groups'.

MFO, Oberwolfach, October 2019. Operator Algebraic Quantum Groups. Invited talk: 'Fixed points of quantum convolution operators'

Oslo, August 2019. Quantum Groups and their analysis. Invited talk: 'On C^* -completions of discrete quantum group rings'

Białowieża, June 2019. 38th Workshop on Geometric Methods in Physics. Invited talk: 'On C^* -completions of discrete quantum group rings'

Copenhagen, May 2019. Subfactors and Quantum Groups. Invited talk: 'On some q -deformations of von

Neumann algebras of free groups and their maximal abelian subalgebras'

Besancon, March 2019. Cohomology of compact quantum groups and related topics. Invited talk: 'What are the quantum group cocycles good for?'

Będlewo, March 2019. Baby Horizons in Mathematics. Invited talk: 'On C^* -algebras of discrete groups'

Teheran, January 2019. Seminar on Harmonic Analysis and Dynamical Systems. Invited talk: 'Is Voiculescu entropy genuinely noncommutative?'

Yazd, January 2019. International Conference on Recent Achievements in Mathematical Sciences. Invited talk: 'New constructions of compact quantum groups'

Levico Terme, October 2018. The 39th International Conference on Quantum Probability and Infinite Dimensional Analysis. Invited talk: Convolution semigroups of states and their generators.

Saarbrücken, October 2018. Cohomology of quantum groups and quantum automorphism groups of finite graphs. Invited talk: Some comments on properties of generating functionals.

MFO, Oberwolfach, May 2018. Interactions between Operator Space Theory and Quantum Probability with Applications to Quantum Information. Invited talk: 'On some recent applications of quantum Markov semigroups'

Warsaw, November 2017, COST Workshop Mathematical models for noncommutativity in physics and quantum spacetime. Invited talk: 'On constructions of compact quantum groups'

Pretoria, July 2017. Operator Algebras and Quantum Dynamics. Invited talk: 'Translation invariant Dirichlet forms in the context of locally compact quantum groups.'

Wuhan, May 2017. Probabilistic Approach to Harmonic Analysis. Invited talk: '(Very) abstract harmonic analysis in the locally compact quantum group setting -- study of quantum subgroups.'

Texas A&M, March 2017. Brazos Analysis Seminar. Invited talk: 'Around Property (T) for quantum groups'

Bangalore, December 2016. Recent Advances in Operator Theory and Operator Algebras. Invited talk: 'Fixed points of completely contractive maps and convolution operators'

Gothenburg, August 2016. Groups and operators. Invited talk: 'Around Property (T) and Haagerup property for quantum groups - a global point of view'

Będlewo, July 2016. 17th Workshop: Non-commutative Probability, Lévy Processes and Operator Algebras, with Applications. Invited talk: 'An application of conditionally free product of states to approximation properties of discrete quantum groups'

Belfast, May 2016. Groups and operator algebras Workshop. Invited talk: 'Haagerup approximation property for arbitrary von Neumann algebras and Schoenberg correspondence'

Oslo, May 2016. Quantum groups: geometry, representations, and beyond. Invited talk: 'Partition wreath products of quantum groups by finite groups'

Indianapolis, September 2015, Annual Wabash Modern Analysis Seminar Meeting. Invited talk: 'Haagerup approximation property for arbitrary von Neumann algebras'

Halifax, August 2015, Abstract Harmonic Analysis. Invited talk: 'Open and closed quantum subgroups of quantum groups'

Herstmonceux, July 2015, Conference on Quantum Groups and Quantum Information Theory. Invited talk: 'Introduction to compact quantum groups'

Besancon, December 2014, Conference on Operator Spaces and Quantum Probability. Invited talk: 'von Neumann algebraic Haagerup property via Markov semigroups'

Lancaster, September 2014, QOP workshop. Invited talk: 'Haagerup property for von Neumann algebras – old and new'

Cheongpung, August 2014. ICM Satellite Conference on Operator Algebras and Applications, 'Haagerup property for arbitrary von Neumann algebras'.

Będlewo, July 2014. 16th Workshop on non-commutative harmonic analysis with applications to probability, 'Haagerup property for arbitrary von Neumann algebras'.

Muenster, May 2014. Quantum Groups and Operator Algebras. Invited talk: 'Haagerup property for arbitrary von Neumann algebras or on the inspirations coming from quantum groups'

Warsaw, April 2014, Wandering Seminar, Mini-conference on Ergodic Theory & Dynamical Systems. Invited talk: 'Introduction to amenability and elements of noncommutative harmonic analysis'

Saarbruecken, March 2014. Quantum Symmetries in Free Probability. Invited talk: 'Quantum symmetry groups and certain categories of two-coloured partitions'

Leeds, September 2013. QOP workshop Quantum (Semi)groups and (Co)actions. Invited talk: 'Haagerup property for discrete quantum groups'

Toronto, June 2013. Conference on Noncommutative Geometry and Quantum Groups. Invited talk: 'On spectral triples by crossed products by equicontinuous actions'

Madrid, June 2013. Workshop on Operator Spaces, Harmonic Analysis and Quantum Probability. Invited talk: 'Haagerup property for locally compact quantum groups'

Thunder Bay, May 2013. Canadian Abstract Harmonic Analysis Symposium. Invited plenary talk: 'Idempotent measures for classical and quantum groups'

Cergy, March 2013. Workshop on Approximation Properties for Quantum Groups and Harmonic Analysis on Quantum Groups : Idempotents, Multipliers and L^p -spaces. Invited talk: 'Idempotent states on quantum groups – motivations, connections to other quantum group concepts and examples of applications'

Bangalore, January 2013. Recent Advances in Operator Theory and Operator Theory. Invited talk: 'On certain limit constructions for quantum symmetry groups'

Luminy, October 2012. *33rd Conference on Quantum Probability and Related Fields*. Invited talk: 'Hopf images, idempotent states and matrix models of quantum groups'

Lille, September 2012. *CEMPI Inaugural Conference*. Invited talk: 'Closed quantum subgroups of locally compact quantum groups and some questions of noncommutative harmonic analysis'

Aberystwyth, August 2012. *Quantum Probabilistic Symmetries*. Invited talk: 'On some categories of coloured partitions related to representations of quantum symmetry groups'

Oslo, June 2012. Noncommutative geometry and quantum groups. Invited talk: 'On spectral triples on crossed products by equicontinuous actions'

Oberwolfach, April 2012. *Mini-Workshop: Endomorphisms, Semigroups and C^* -Algebras of Rings*. Invited talk: 'Entropy and invariant abelian subalgebras for endomorphisms of Cuntz algebras'

Edinburgh, January 2012, *Conference on Quantum Probability, Noncommutative Geometry and Quantum Information*. Invited talk: 'On certain quantum symmetry groups related to liberations'

Bucharest, April 2011, *4th meeting of the EU Noncommutative Geometry Network*. Invited talk: 'Quantum isometry groups of duals of certain discrete groups'.

Nottingham, September 2010, *Workshop on C^* -algebras*. Invited talk: 'How noncommutative is noncommutative topological entropy, or on searching for commutative subsystems of quantum evolutions'.

Clermont-Ferrand, August 2010. *Quantum Groups Conference*. Invited talk: 'On some convolution equations for states on compact quantum groups'

Bangalore, August 2010. *International Conference on Quantum Probability and Related Topics (Satellite meeting of the ICM)*. Invited talk: 'Quantum Levy processes on locally compact quantum groups'

Będlewo, July 2010. *13th Workshop on non-commutative harmonic analysis with applications to probability*, 'How noncommutative is noncommutative topological entropy?'

Leeds, May 2010. *Banach algebra and operator space techniques in topological group theory*. Invited talk: 'On some convolution equations for states on compact quantum groups'

Kraków, July 2009. *III Forum of Polish Mathematicians (Congress of the Polish Mathematical Society)*. Invited talk: 'Probability on topological quantum groups'

Luminy, June 2009. *Noncommutative L^p spaces, operator spaces and applications*, 'Approximation properties and entropy estimates for crossed products by actions of amenable discrete quantum groups'.

Oberwolfach, February 2009. *Mini-Workshop: Product Systems and Independence in Quantum Dynamics*, Invited talk: 'Isometric dilations of representations of product systems of C^* -correspondences over N^k '

Leuven, November 2008. *Workshop Operator algebraic aspects of quantum groups*, 'Approximation properties and entropy estimates for crossed products by actions of amenable discrete quantum groups'.

Będlewo, August 2008. *11th Workshop on non-commutative harmonic analysis with applications to probability*, 'On some questions connected with Voiculescu's noncommutative topological entropy'.

Guanajuato, September 2007. *28th Conference on Quantum Probability and Related Topics*, Invited talk: 'Quantum Lévy processes on discrete quantum groups'.

Będlewo, August 2007. *10th Workshop on non-commutative harmonic analysis with applications to probability*, 'Wold decomposition: from a single operator to a product system of C^* -correspondences'.

Gdańsk, September 2006. *Forum of Polish Mathematicians (Congress of the Polish Mathematical Society)*. Invited talk: 'Through noncommutative mathematics to Lévy processes on compact quantum groups'

Nottingham, July 2006. *Quantum Probability, Information and Control Symposium*. 'Discrete and continuous quantum stochastic evolutions on C^* -bialgebras'.

Belfast, May 2006. *Operator Algebra Workshop 2006*, 'Ergodic properties of convolution operators on compact quantum groups'.

Greifswald, March 2006. *International conference on Quantum Probability and Its Applications*, 'Ergodic properties of convolution operators on compact quantum groups'.

Będlewo, August 2005. *8th Workshop on non-commutative harmonic analysis with applications to probability*, 'What are Lévy processes on compact quantum groups?'.

Bucharest, August 2005. *6th Operator Algebras International Conference Operator Algebras and Mathematical Physics*, 'Entropy of shifts in higher rank graph algebras'

Cork, June 2005. *Operator Algebras and Applications*, 'Entropy of shifts in higher rank graph algebras'

Trento, February 2005. *26th QP Conference, Quantum Probability and Related Topics*, 'Generators of completely positive and contractive convolution cocycles'

Cochin, January 2005. *International Conference on Harmonic Analysis and Quantum Groups*. 'Quantum stochastic convolution cocycles on operator space coalgebras'

Calcutta, December 2004. *Conference on Operator Theory, Quantum Probability and Noncommutative Geometry, in honour of Professor Kalyan B.Sinha*. 'Generators of completely positive and contractive convolution cocycles'

Denver, July 2004. *Quantum Structures 2004*, 'Quantum group stochastic cocycles'.

Będlewo, June 2004. *25th QP Conference, Quantum Probability and Related Topics*. 'Quantum stochastic convolution cocycles on C^* -bialgebras'.

Belfast, March 2004. *British Mathematical Colloquium*, 'Levy processes on quantum groups'.

Łódź, September 2003. *2nd Workshop on Quantum Probability and Operator Algebras*. 'The classical scheme in noncommutative multiparameter ergodic theory'.

Greifswald, June 2003. *Workshop on Free Probability and Noncommutative L^p -spaces*. 'A few new results in noncommutative ergodic theory'.

Wrocław, September 2002. 2nd Workshop on Infinite Dimensional Harmonic Analysis and Quantum Probability, 'Individual ergodic theorem for several kernels in L^1 over a von Neumann algebra'.

Trento, June 2002. Conference on Infinite Dimensional Analysis and Quantum Probability, 'Noncommutative Banach principle for multiple sequences and individual ergodic theorem for several kernels'.

Wrocław, September 2001. 1st Workshop on Infinite Dimensional Harmonic Analysis and Quantum Probability, 'On the unconditional bundle convergence in L^2 over a von Neumann algebra'.

Invited seminar talks

Florianopolis, *Operator Algebras Seminar (virtual)*, May 2022. 'UCT, groupoids, and Haagerup trick and all that'

Copenhagen-Oslo, *Virtual Quantum Groups Seminar*, October 2021. 'Gaussian states on quantum groups'

Glasgow-Oxford, *UK Virtual Operator Algebras Seminar*, April 2021. 'Classifying C^* -algebras with the K-theory: (Hecke) algebras of Coxeter groups'.

UPenn, *Mid-Atlantic Analysis Seminar Series*, September 2020. 'Approximation properties of groups and operator algebras: towards maximal Haagerup subgroups and subalgebras'

Houston, *Virtual Noncommutative Analysis Weekly Seminar*, June 2020. 'Maximal Haagerup subgroups and subalgebras'

Besaçon, *Functional Analysis Seminar*, May 2020. 'Furstenberg boundary of a discrete quantum group'

Leuven, *Analysis Seminar*, November 2019. 'Noncommutative Furstenberg boundary'

Dresden, *Departmental Colloquium*, April 2019. 'On C^* -completions of discrete (quantum) group ring'

Uniwersytet w Białymstoku, *Departmental Seminar*, December 2018. 'Haagerup property for von Neumann algebras'

TU Delft, *Analysis Seminar*, November 2018. 'Translation invariant noncommutative Dirichlet forms'

Warsaw, *Noncommutative Geometry Seminar*, October 2018. 'Quantum Dirichlet forms and their applications to locally compact quantum groups'

SISSA, *Analysis Seminar*, May 2018. 'On translation invariant quantum Dirichlet forms'

Haifa, *Departmental Colloquium*, April 2018. 'Quantum convolution semigroups and their generators'

Besaçon, *Functional Analysis Seminar*, October 2017. 'On translation invariant quantum Dirichlet forms'.

Warsaw, *Noncommutative Geometry Seminar*, October 2017. 'On the quantum Rosenberg conjecture'.

Warsaw, *Noncommutative Geometry Seminar*, October 2017. 'Around property (T) for quantum groups'.

Pretoria, *Physics Department Colloquium*, July 2017. 'On new constructions of quantum groups'

Texas, *Analysis Seminar*, April 2017. 'Fixed points of completely contractive maps and convolution operators'

Warsaw, *Noncommutative Geometry Seminar*, March 2016. 'Fixed points of completely contractive maps'.

Belfast, *Departmental Colloquium*, February 2016. 'Ternary rings of operators and fixed points of completely contractive maps'.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, October 2015. 'Fixed points of completely contractive maps, ternary rings of operators and convolution operators on classical and quantum groups'

Warsaw, *Noncommutative Geometry Seminar*, October 2015. 'Partition wreath products of quantum groups by finite groups'.

Urbana-Champaign, *Analysis Seminar*, September 2015. 'Fixed points of completely contractive maps,

ternary rings of operators and convolution operators on classical and quantum groups'

Warsaw, *Noncommutative Geometry Seminar*, 'Abstract approaches to Schönberg correspondence', February 2015

Saarbrücken, *Functional Analysis Seminar*, February 2015. 'On some rectangular structures related to free permutation groups'

Warsaw, *Noncommutative Geometry Seminar*, January 2015. 'Haagerup property for arbitrary von Neumann algebras',

Besançon, *Functional Analysis Seminar*, November 2014. 'How noncommutative is noncommutative topological entropy?'

Caen, *Operator Algebras Seminar*, October 2014. 'Around the Haagerup property and Property (T) for quantum groups

Oslo, *Operator Algebras Seminar*, June 2014. 'Haagerup approximation property for locally compact quantum groups'

Warsaw, *Mathematical Physics Operator Algebras Seminar*, June 2014 'Haagerup approximation property for von Neumann algebras - old and new'

Teheran, *IPM Seminar*, January 2014. 'On new constructions of compact quantum groups'.

Warsaw, *Noncommutative Geometry Seminar*, 'Haagerup Property for locally compact classical and quantum groups', October 2013.

Oslo, *Operator Algebras Seminar*, April 2013. 'On closed subgroups of locally compact quantum groups'

Warsaw, *Noncommutative Geometry Seminar*, 'On certain limit constructions for quantum symmetry groups', February 2013.

Warsaw, *Dynamical Systems Seminar (IMPAN)*, February 2013, 'On characterising geometric properties of locally compact groups by the properties of typical representations and actions'.

Warsaw, *Geometric Group Theory Seminar (IMPAN)*, December 2012. 'On characterising geometric properties of locally compact groups by the properties of typical representations'.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, December 2012. 'On Haagerup Property for locally compact classical and quantum groups'.

Warsaw, *Noncommutative Geometry Seminar*, October 2012. 'Spectral triples on crossed products by equicontinuous actions'

Oulu, *Department of Mathematics Colloquium*, May 2012. 'Quantum symmetry groups'

Warsaw, *Noncommutative Geometry Seminar*, March 2012. 'Categories of coloured partitions related to representations of compact quantum groups'.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, February 2012. 'Convolution semigroups of states, the Reconstruction Theorem for quantum Levy processes and quantum stochastic differential equations'.

Warsaw, *Noncommutative Geometry Seminar*, December 2011. 'Hopf images, idempotent states and matrix models of quantum groups'.

Warsaw, *Dynamical Systems Seminar (IMPAN)*, November 2011 'On a certain question of Ornstein and Weiss and entropy for actions of sofic groups (after Lewis Bowen)'.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, November 2011. 'On quantum Levy processes and convolution semigroups of states'.

Wrocław, *Noncommutative Harmonic Analysis Seminar*, June 2011. 'On quantum symmetry groups acting on the duals of free groups in a word-length and block-length preserving fashion'.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, May 2011. 'On certain constructions of 'good'

spectral triples’.

Warsaw, *Scientific Council of IMPAN*, April 2011 ‘Is the noncommutative entropy really noncommutative?’

Wrocław, *Noncommutative Harmonic Analysis Seminar*, April 2011. ‘On a certain family of compact quantum groups related to classical finitely generated groups’.

Warsaw, *Dynamical Systems Seminar (IMPAN)*, March 2011 ‘On connections between classical and quantum topological entropy’.

Cheong-Ju, *Functional Analysis Seminar*, February 2011. ‘On noncommutative topological entropy’.

Warsaw, *Mathematical Physics Operator Algebras Seminar*, January 2011. ‘Idempotent states on locally compact quantum groups’.

Warsaw, *Mathematical Physics Duality Theory Seminar*, January 2011. ‘On classical and quantum topological entropy’.

Toronto, *Fields Institute Operator Algebras Seminar*, December 2010 ‘How noncommutative is noncommutative topological entropy?’.

Waterloo, *Department of Mathematics Colloquium*, December 2010. ‘On new constructions of compact quantum groups’.

Warsaw, *Noncommutative Geometry Seminar*, December 2010. ‘Searching for classical subsystems of quantum evolutions’.

Warsaw, *Noncommutative Geometry Seminar*, November 2010. ‘How quantum isometry groups met liberated quantum groups and produced new examples’.

Cardiff, *Mathematical Physics Seminar*, September 2010. ‘How noncommutative is noncommutative topological entropy or on searching for classical subsystems of quantum evolutions’.

Lancaster, *Pure Mathematics Seminar*, May 2010. ‘Noncommutative topological entropy is genuinely not commutative’.

Cergy, *Séminaire Géométrie, EDP et Physique Mathématique*, April 2010 ‘Quantum isometry groups associated with group C^* -algebras’.

ISI Kolkata, *Pure Mathematics Seminar*, March 2010, ‘On noncommutative topological entropy’

Sendai, *Departmental Colloquium*, November 2009 ‘On automorphisms of C^* -algebras with genuinely noncommutative Voiculescu entropy’

Tokyo, *Operator Algebras Seminar*, October 2009 ‘On some questions related to Voiculescu entropy’

Campobasso, *Mathematics Seminar*, May 2009, ‘Topological theories of quantum groups’

Łódź, *Polish Mathematical Society Lecture Series*, January 2009, ‘In search of a good definition, or what is a locally compact quantum group?’

Odense, *Analysis Seminar*, December 2008. ‘On some questions related to the Voiculescu’s noncommutative topological entropy’

Nottingham, *Quantum Information and Quantum Statistics Seminar*, November 2008. ‘Quantum symmetry groups and quantum isometry groups’

Besaçon, *Functional Analysis Seminar*, July 2008. ‘On approximation properties and Voiculescu entropy for crossed products of C^* -algebras by discrete amenable quantum groups’.

ISI Bangalore, *Pure Maths Seminar*, June 2008. ‘How noncommutative is noncommutative topological entropy?’

ISI Kolkata, *Pure Maths Seminar*, June 2008. ‘On discrete and continuous quantum stochastic evolutions on locally compact quantum groups.’

Glasgow, *Analysis Seminar*, April 2008. ‘How noncommutative is noncommutative topological entropy?’

Nottingham, *Analysis Seminar*, February 2008. 'Idempotent states on compact quantum groups'

Kraków, *Operator Theory Seminar*, December 2007. 'On some generalizations of the Wold decomposition for commuting isometries'

London, *London Analysis Seminar*, December 2007. 'Nonsymmetric Dirichlet forms in the noncommutative context'

Newcastle, *Analysis Seminar*, November 2007. 'Higher-rank graph operator algebras and related dilation results'

Oxford, *Functional Analysis Seminar*, January 2007. 'Quantum Lévy processes on compact quantum semigroups'

Lancaster, *Pure Mathematics Seminar*, March 2006. 'Quantum stochastic convolution cocycles'.

Besançon, *Functional Analysis Seminar*, October 2005. 'Quantum stochastic convolution cocycles'.

Wrocław, *Harmonic Analysis Seminar*, January 2004. 'On hypercontractivity in L^p -spaces over a von Neumann algebra with a non-tracial state'.

Graduate schools attended

Winter School on Operator Spaces, Noncommutative Probability and Quantum Groups, Metabief (France), December 2014

Graduate school Recent Advances in Operator Theory and Operator Algebras, ISI Bangalore, January 2013.

Winter School on Operator Algebras, RIMS Kyoto, December 2011.

Advanced Course on Dynamical Systems, CRM Barcelona, June 2011

Spring School on Dynamical Systems, Będlewo, May 2011

3rd ILJU School of Mathematics. Banach Spaces and Related Topics. Gyeong-Ju. February 2011.

Quantum Potential Theory. Greifswald, February 2007.

Noncommutative spaces: Their topology and measure theory (LMS/EPSRC Short Course). Southampton, September 2004.

Discrete Groups, Operator Spaces and Operator Algebras. Paris, July 2003.

Quantum Independent Increment Processes. Greifswald, March 2003.