Curriculum Vitæ

Søren Fuglede Jørgensen

Office Address:	Matematiske institutionen, Uppsala University, Office number 14265 Lägerhyddsvägen 1, Hus 5, 751 06 Uppsala, Sweden
Office Phone:	+46 18 471 3226
Email Address:	s@fuglede.dk (public key)
Homepage:	http://fuglede.dk/en/maths/
Citizenship:	Danish
Date of Birth:	July 15, 1986 (Haderslev, Denmark)
Date of CV:	July 5, 2015 (latest version available here)

Work history and education

2013 – 2015	**Researcher** (postdoc equivalent), Uppsala University
2013	**Scientific assistant** (postdoc equivalent), Aarhus University
2009 – 2013	**PhD in Mathematics**, Aarhus University Thesis: Semi-classical properties of the quantum representations of mapping class groups (link) Supervisor: Jørgen Ellegaard Andersen
2008 – 2011	**Honours MSc in Mathematics**, Aarhus University Thesis: Quantum representations of mapping class groups (link) Supervisor: Jørgen Ellegaard Andersen
2005 – 2008	**BSc in Mathematics**, Aarhus University Including education in Physics and Computer Science Bachelor's thesis: The Stone–von Neumann Theorem Supervisor: Bent Ørsted

As visitor

2010 Fall	Visiting scholar, Department of Mathematics, University of California, Berkeley Scientific host: Nicolai Reshetikhin

Scientific grants

2012 – 2013	Globalization funds via AGSoS/Faculty of Science, Aarhus University
2010 – 2012	QGM (funded via Danish National Research Foundation)
2010	Aarhus University Research Foundation travel grant
2010	Oticon Foundation travel grant
2009	Globalization funds via AGSoS/Faculty of Science, Aarhus University

Main research interests

Two- and three-dimensional topology via invariants from topological quantum field theory.

Publications

Submitted for peer review

1. (with Jørgen Ellegaard Andersen, Benjamin Himpel, Johan Martens and Brendan McLellan) *The Witten–Reshetikhin–Turaev invariant for links in finite order mapping tori I*, 40 pages. arXiv:1408.2499 [math.GT]
2. (with Jens Kristian Egsgaard) *The homological content of the Jones representations at $q = -1$*, 20 pages. arXiv:1402.6059 [math.GT]

3. (with Jørgen Ellegaard Andersen) *On the Witten–Reshetikhin–Turaev invariants of torus bundles*, 33 pages. arXiv:1206.2552 [math.QA]

Selected lectures and seminar talks

2014 Mar. **Kozhikode**, India (KSOM conference on Analytic and Algebraic Geometry Related to Bundles): The AMU conjecture for punctured spheres
2014 Mar. **Mumbai**, India (TIFR): Introduction to topological quantum field theory [2 lectures]
2014 Feb. **Dijon**, France (Winter Braids IV): The Jones representations of braid groups at $q = -1$
2013 Dec. **Uppsala**, Sweden (Geometry and Topology Seminar): Quantum representations of mapping class groups with a view towards surface dynamics
2013 Oct. **Aarhus**, Denmark (FFS): A topological quantum computer
2012 Nov. **Oxford**, UK (Junior Geometry and Topology Seminar): Quantum representations and their asymptotics
2012 Sep. **Aarhus**, Denmark (FFS): Quantum topology in a nutshell
2012 Apr. **Barcelona**, Spain (Workshop on topological quantum field theories): Quantum invariants of torus bundles and their asymptotics
2012 Feb. **Les Houches**, France (Winter School in Mathematical Physics): Witten-Reshetikhin-Turaev invariants of mapping tori and their asymptotics
2011 June **Aarhus**, Denmark (GEOMAPS Retreat/Workshop): Asymptotic expansion of the Witten–Reshetikhin–Turaev invariant for mapping tori over a torus
2010 Oct. **Berkeley**, U.S. (GRASP seminar): Quantum representations of mapping class groups and TQFTs for newcomers
2009 Nov. **Aarhus**, Denmark (Eulers Venner): The Stone–von Neumann Theorem

Teaching experience

As lecturer/course responsible

2015 (P4) Elementary topology

As instructor (tutor/teaching assistant) at Aarhus University

2013 (Q3+4) Geometry
2012 (Q3+4) Geometry
2011 (Q2) Introduction to mathematical analysis
2011 (Q1) Perspectives in mathematics
2011 (Q3+4) Geometry
2010 (Q3+4) Linear algebra
2009 (Q2) Calculus 2
2009 (Q1) Calculus 1
2008 (Q2) Introduction to mathematical analysis
2008 (Q1) Calculus 1

Selected conference, workshop, and master class participation

2015 May **Copenhagen**, Denmark: Master Class on Quantum Mathematics
2014 June **Luminy**, France: Geometric and Quantum Topology in Dimension 3
2014 Mar. **Kozhikode**, India: KSOM conference on Analytic and Algebraic Geometry Related to Bundles
2014 Feb. **Dijon**, France: Winter Braids IV
2012 Dec. **Oxford**, UK: Aspects of Topology in Geometry and Physics
2012 Apr. **Barcelona**, Spain: Workshop on topological quantum field theories
2012 Feb. **Les Houches**, France: Winter School in Mathematical Physics
2011 Aug. **Aarhus**, Denmark: Aarhus Gauge Theory Workshop
2011 Mar. **Les Diablerets**, Switzerland: Spring School in Geometry and Quantum Topology
2010 Dec. **Aarhus**, Denmark: QGM Conference on Quantization of Singular Spaces
2010 June **Aarhus**, Denmark: QGM Master Class on Cluster Algebras by Sergey Fomin and Phillippe Di Francesco
2010 Jan. **Hahei**, New Zealand: NZIMA workshop on TQFTs and Knot Homology Theories: Topological Quantum Field Theory and Knot Homology Theory
2010 Jan. **Hanmer Springs**, New Zealand: NZMRI Summer Workshop: Groups, Representations and Number Theory
2009 Oct. **Sandbjerg**, Denmark: CTQM Nielsen Retreat

Other professional activities

2011 – 2013 Organizer of the weekly student seminar "FFS" at the Department of Mathematics, Aarhus University
2009 – 2012 Speaker for various outreach projects aimed at high schools (gymnasier), including "Besøgsservice", the QGM Geek Club, and the Math Club Weekend at QGM.
2008 – 2011 Member of the teaching committee and the subcommittee for advanced courses at the Department of Mathematics, Aarhus University

References

Jørgen Ellegaard Andersen
Centre for Quantum Geometry of Moduli Spaces
Aarhus University
DK-8000 Aarhus C, Denmark
andersen@qgm.au.dk

Nicolai Reshetikhin
Department of Mathematics
University of California, Berkeley
Berkeley CA 94720-3840, U.S.
reshetik@math.berkeley.edu

Robert Penner
Caltech Mathematics Department
California Institute of Technology
Pasadena, CA 91125
rpenner@caltech.edu