

Sven Raum

Curriculum Vitae

Germany
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Research Interests

Operator algebras Groups, groupoids and other group-like objects Representation theory

Current Position

Apr 2023 – **Professor (W2)**, *Institute of Mathematics*, University of Potsdam, Germany

Previous Positions

- 2018 – 2023 **Associate Professor**, *Department of Mathematics*, Stockholm University, Sweden
- 2016 – 2018 **Instructor**, *Section of Mathematics*, EPF Lausanne, Switzerland
- 2015 – 2016 **Marie Curie Fellow (Return Phase)**, *Department of Mathematics*, University of Münster, Germany
- 2014 – 2015 **Marie Curie Fellow**, *RIMS*, Kyoto University, Japan
- 2013 – 2014 **Postdoctoral Researcher**, *Unit of Pure and Applied Mathematics*, ENS Lyon, France
- 2009 – 2013 **PhD Student**, *Department of Mathematics*, KU Leuven, Belgium
- 2007 – 2009 **Student Teaching Assistant**, *Department of Mathematics*, University of Münster, Germany

Education

- 2019 **Docent i matematik**, *Stockholm University*, Sweden
- 2009–2013 **PhD in Mathematics**, *KU Leuven*, Belgium, Supervisor: Stefaan Vaes
- 2005–2009 **Diplom in Mathematics**, *University of Münster*, Germany, Supervisor: Joachim Cuntz
- 1997–2004 **Abitur**, *Grotefeld Gymnasium*, Hann. Münden, Germany

Awards and Fellowships

- 2024 **Prize for Excellence in Teaching of the Faculty of Science**, *University of Potsdam*
- 2014–2016 **Marie Curie International Outgoing Fellowship**, *European Commission*

Grants and Funding

- 2023 **50.000€ conference grants**, *HCM, DFG, Compositio Foundation*, with J. Arnlind, F. Arici, K. van den Dungen
- 2023–2026 **3.520.000 SEK (325.000€) project grant**, *Vetenskapsrådet*, Sweden, declined
- 2021–2023 **1.850.000 SEK (180.000€) project grant**, *Knut och Alice Wallenberg Stiftelse*, Sweden
- 2020 **198.000 NOK (18.000€) conference grant**, *Trond Mohn Stiftelse*, Norway, with N. Larsen, M. Caspers
- 2019 **341.000 SEK (31.000€) conference grant**, *Vetenskapsrådet, Wenner-Grenn Stiftelse, Marcus Wallenberg Stiftelse*, Sweden, with M. Goffeng, L. Turowska
- 2019–2022 **3.500.000 SEK (340.000€) starting grant**, *Vetenskapsrådet*, Sweden
- 2016 **3.500€ conference grant**, *Internationalisierungsfond*, University of Münster, Germany
- 2014–2016 **200.000€**, *Marie Curie International Outgoing Fellowship*, European Commission
- 2009 **2.000€ travel scholarship**, *University of Münster*, Germany

Long-term Research Stays

- 2020/21 **Visiting Professorship, 6 months**, *Institute of Mathematics*, Polish Academy of Sciences, Poland
2011 **Programme “Von Neumann algebras and ergodic group theory”, 2 months**, *Institut Henri Poincaré*, France

Supervision of PhD Students and Postdocs

- Since 2023 **2 Postdocs (S. Pooya, J. Taylor), 1 PhD (D. Ulrik)**, *University of Potsdam*
2018–2023 **2 Postdocs (U. Enstad, S. Pooya); 1 PhD (G. Favre); 1 PhD co-supervision (L. Olssen)**, *Stockholm University*

Teaching

University of Potsdam

- 2024/25 **Algebra; Reflection groups; Linear algebraic groups**
2023/24 **Linear algebra and analytic geometry I & II; Algebra; Algebra and number theory (teacher students)**
2022/23 **Geometric group theory; Lie algebras (seminar); Algebra and number theory (teacher students)**
2022/23 **Expander graphs; Examiner for theses**
2021/22 **Linear algebra; Seminarikurs; Examiner for theses**
2020/21 **Complex analysis; Geometric group theory; Seminarikurs**
2019/20 **Combinatorics; Operator algebras; Analysis; Seminarikurs**
2018/19 **ODE; Analysis**

EPFL

- 2017/18 **Homology and cohomology; Lie groups; Linear algebra for engineers**
2016/17 **Abstract harmonic analysis; Linear algebra for engineers**

University of Münster

- 2015/16 **von Neumann algebras; Abstract harmonic analysis**

Selected Talks and Invitations

- 2024/25 **BIRS Workshop**, *Cartan subalgebras in operator algebras*
MFO Workshop, *C*-algebras*
2022/23 **Workshop**, *Totally disconnected, locally compact groups: local to global*, University of Münster
2021/22 **MFO Workshop**, *C*-algebras*
ICM satellite conference, *Operator algebras, dynamics and groups*, University of Copenhagen
MFO Workshop, *Quantum groups*
CIRM Workshop, *Operator Algebras and Dynamics of groups*
2019/20 **MFO Mini-Workshop**, *Operator Algebraic Quantum Groups*
BIRS Workshop, *Classification Problems in von Neumann Algebras*
2018/19 **MFO Workshop**, *C*-Algebras*
Séminaire Bourbaki, *C*-simplicity after Breuillard, Kalantar, Kennedy, Ozawa*
2017/18 **AIM Workshop**, *Classification of Group von Neumann Algebras*
2015/16 **MFO Workshop**, *C*-Algebras*
Mittag-Leffler Institute Workshop, *Von Neumann Algebras*
2014/15 **MFO Workshop**, *Noncommutative Geometry*

Organisation of Scientific Meetings

- May 2024 **Point sets: Dynamics, sampling, operator algebras**, *University of Oslo*, 33 participants

- May 2023 **NSeaG2023**, *HCM Bonn*, Summer school and workshop, 50 participants
- Mar 2023 **SOS: Swedish Operator Algebraists**, *Stockholm University*, two-day meeting
- Nov 2022 **SOS: Swedish Operator Algebraists**, *University of Gothenburg*, one-day meeting
- Aug 2022 **Operator algebras and noncommutative geometry**, *Aalto University*, Parallel session at the Nordic Congress of Mathematics
- May 2022 **C*-algebras and geometry of groups and semigroups**, *University of Oslo*, 35 participants
- Mar 2022 **Noncommutativity in the North**, *University of Gothenburg*, 84 participants
- Jan 2022 **SOS: Swedish Operator Algebraists**, *University of Gothenburg*, two-day meeting
- Mar 2021 **C*-algebras and geometry of groups and semigroups**, *Online*
- May 2017 **Approximate lattices**, *EPFL/Neuchâtel*, two-day reading group
- Jul 2016 **Young Mathematicians in C*-Algebras**, *University of Münster*, 123 participants

Institutional Responsibilities

- From 2026 **Organiser of the colloquium of the Institute of Mathematics**, *University of Potsdam*
- Since 2023 **Head of programme committee BSc/MSc Mathematics**, *University of Potsdam*
- Since 2023 **PhD graduation committee representative**, *University of Potsdam*
- Since 2022 **Organiser of group theory and operator algebra seminar**, *Stockholm/Potsdam*
- 2022–2023 **Coordinator outreach to students**, *Stockholm University*
- 2021–2023 **Board member of Mathematics Department**, *Stockholm University*
- 2020–2022 **Organiser of Algebra/Operator Algebra/Representation Theory seminar**, *Stockholm University*
- 2019–2022 **Colloquium chair**, *Stockholm Mathematics Centre*
- 2019–2020 **Organiser of Harmonic Analysis seminar**, *Stockholm University*
- 2016–2018 **Co-organiser of group theory seminar**, *EPFL*

Reviewing Activities

- Agencies **DFG (Germany), FWO (Belgium), Irish Research Council, US-Israel BSF, NCN (Poland)**
- Journals **Acta Math., Adv. Math., Ann. Math., Duke Math. J., Compositio, JEMS, Publ. Math. IHES**
- Books **Springer GTM**
- Databases **zbMATH (since 2018), MathSciNet (since 2012)**

Institutional Memberships

- Since 2020 **Deutsche Mathematiker-Vereinigung**
- Since 2019 **Friends of Oberwolfach**
- 2018–2022 **Svenska matematikersamfundet**
- 2018–2020 **American Mathematical Society**
- Since 2012 **European Mathematical Society**

Formal teaching training

- 2018/19 **Courses on teaching, supervision, digital tools**, *Stockholm University*, Sweden
- 2017/18 **Courses on interactive teaching, ICT**, *EPFL*, Switzerland
- 2016/17 **Courses on lecturing, course design, questioning**, *EPFL*, Switzerland
- 2015/16 **Teaching and employability**, *University of Münster*, Germany
 - 2011 **Assertive communication**, *KU Leuven*, Belgium
 - 2008 **Counselling techniques**, *CIMCEA*, Germany
 - 2007 **Fit for teaching mathematics**, *CIMCEA*, Germany

Languages

German (Mother tongue); English (Fluent); Dutch (Fluent, C1 certified); French (Fluent, B2 certified); Swedish (Fluent); Persian (Good); Japanese (Basic, JLPT N5)

Publications

List of publications on zbMATH: www.zbmath.org/?q=ia%3Araum.sven

Author profile on zbMATH: www.zbmath.org/authors/raum.sven