

Dr. Martin Raum

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CURRENT ACADEMIC POSITION

Since Oct. 2016 Associate Professor at Chalmers University of Technology, Gothenburg, Sweden.

PREVIOUS ACADEMIC POSITIONS

Jun. 2015 to Sep. 2016 Senior Lecturer at Chalmers University of Technology, Gothenburg, Sweden.
Sep. 2014 to May 2015 Post-doc at MPI for Mathematics, Bonn, Germany.
Sep. 2012 to Aug. 2014 ETH Fellow at ETH Zurich, Switzerland.
Jun. 2012 to Aug. 2012 Post-doc at MPI for Mathematics, Bonn, Germany.

EDUCATION

Oct. 2016 Docentship at Chalmers University of Technology, Gothenburg, Sweden.
Jun. 2012 PhD in Mathematics at University of Bonn, Germany.
Dual weights in the theory of harmonic Siegel modular forms.
Magna cum laude. Adviser: Don B. Zagier.
Mar. 2009 Diplom Mathematik at RWTH University Aachen, Germany.

AWARDS AND ACHIEVEMENTS

Oct. 2009 to Jun. 2012 IMPRS scholarship by the Max Planck Society.
Nov. 2011 Friedrich-Wilhelm-Preis by RWTH Aachen University.
Jun. 2010 Springorum-Denkmünze by RWTH Aachen University.
Oct. 2009 Highest award at the DMV Studierendenkonferenz.
Nov. 2004 to Mar. 2009 Scholarship by the Studienstiftung des deutschen Volkes.
Jun. 2008 Schöneborn-Preis by RWTH Aachen University.
Sep. 2004 Highest award in the German federal competition in computer sciences
Sep. 2004 Special award for Human-Computer-Interface-Design.

GRANTS

- Oct. 2019 *Project Grant. Swedish Research Council.*
3,200,000SEK (approx. 300,000€).
Real-Analytic Orthogonal Modular Forms as Generating Series.
- Apr. 2018 *Post-doc project grant. KAW.*
2,142,000SEK (approx. 200,000€).
The skew Maaß lift: Aftermath in representation theory and physics.
- Sep. 2016 *Workshop Grant. GoCAS.*
30,000SEK (approx. 3,100€).
Number Theory Visitor Seminar Fall 2016.
Co-PIs: Julia Brandes, Dennis Eriksson, Sebastián Herrero.
- Sep. 2016 *Visiting Scientist Grant. GoCAS.*
31,000SEK (approx. 3,200€).
Research visit of Yingkun Li.
- Jun. 2016 *Interdisciplinary Seed Grant GoCAS.*
292,000SEK (approx. 32,000€).
FPGA design methods, with application to pure mathematics.
Co-PIs: Mary Sheeran, Carl-Johan Seger, Bo Joel Svensson.
- Jan. 2016 *Conference Grant. GoCAS.*
45,000SEK (approx. 4,900€).
Conference on Interactions between Ergodic Theory and Number Theory.
Co-PIs: Dennis Eriksson, Michael Björklund.
- Jan. 2016 *Conference Grant. GoCAS.*
25,000SEK (approx. 2,700€).
Fifth Workshop of the Nordic Number theory Network.
Co-PIs: Julia Brandes, Dennis Eriksson, Per Salberger, Amos Turchet.
- Nov. 2015 *Unga Forskare project grant. Swedish Research Council.*
3,000,000SEK (approx. 330,000€).
Siegel Modular Generating Functions.
- Jul. 2015 *Conference Grant. GoCAS.*
35,000SEK (approx. 3,800€).
Third Workshop of the Nordic Number theory Network.
Co-PIs: Dennis Eriksson, Per Salberger, Amos Turchet.
- Jun. 2012 *ETH Fellowship.*
CHF200,000 (approx. 242,000€).
Real-analytic Siegel modular forms.
- Jan. 2012 *RWTH Aachen Internal Grant.*
6,000€.
1st EU-US conference on Automorphic Forms and related topics.
Co-PIs: Aloys Krieg.
- Dec. 2011 *NSF-Grant DMS-1153219.*
\$50,000 (approx. 36,000€).
1st EU-US conference on Automorphic Forms and related topics.
Co-PIs: Olav Richter, Lynne Walling.

PHD STUDENTS AND POST-DOCS

Caihua Luo. Post-doc at Chalmers University of Technology.
Started Mar. 2019.

Tobias Magnusson. PhD student at Chalmers University of Technology.
Principal adviser. Co-adviser is Anders Södergren.
Started Aug. 2018.

Jiacheng Xia. PhD student at Chalmers University of Technology.
Principal adviser. Co-adviser is Dennis Eriksson.
Started Sep. 2016.

Manh Hung Tran. PhD student at Chalmers University of Technology.
Co-adviser. Principal adviser was Dennis Eriksson. Previous adviser was Per Sahlberger.
Graduated Jan. 2020.
The density of rational points and invariants of genus one curves.

Sebastián Herrero. Post-doc at Chalmers University of Technology.
Dec. 2016–Dec. 2018. Now professor at Pontificia Universidad Católica de Valparaíso.

Andreas Freh. PhD student at RWTH Aachen University.
Co-advised with Aloys Krieg.
Graduated Oct. 2017.
Dimension Formulas for Spaces of Hermitian Modular Forms.

SERVICE

Since 2019	Department council of the Department of Mathematical Sciences.
Since 2010	Referee/Reviewer for MathSciNet, Zentralblatt, AJM, Compositio, IMRN, J. LMS, Jussieux etc. Approx. 25 reviews per year.
Jun. 2019	PhD committee, Medet Nursultanov, Chalmers University of Technology.
Jul. 2018	Program committee, NPFL 2018 at ICFP (Computer Science).
Sep. 2017	Interdisciplinary panel, KAW grants, Chalmers University of Technology.
Sep. 2016 to Dec. 2017	Organizer of the Chalmers Number Theory and Geometry Seminar.
Sep. 2013 to Aug. 2014	Co-Organizer, Number Theory Seminar, ETH Zurich.

INSTITUTIONAL MEMBERSHIPS

European Mathematical Society.
German Mathematical Society.

ORGANIZED EVENTS

- Sep. 2017 *Real-Analytic Automorphic Forms.*
University of North Texas, Sep. 9 and 10, 2017.
Organized jointly with Olav Richter.
- May. 2017 *Modular forms are everywhere. Birthday conference for Don Zagier.*
MPI for Mathematics, May 22 to May 26, 2017.
Organized jointly with Kathrin Bringmann, Michael Griffin, Maxim Kontsevich, Pieter Moree, Ken Ono.
- Nov. 2016 *Fifth workshop of the Nordic Number theory Network.*
Chalmers University of Technology, Nov. 25 and 26, 2016.
Organized jointly with Julia Brandes, Dennis Eriksson, Per Salberger, and Amos Turchet.
- Aug. 2016 *Workshop in Number Theory and Dynamics.*
Chalmers University of Technology, Aug. 18 and 19, 2016.
Organized jointly with Michael Björklund and Dennis Eriksson.
- Dec. 2015 *Third workshop of the Nordic Number theory Network.*
Chalmers University of Technology, Dec. 4 and 5, 2015.
Organized jointly with Dennis Eriksson, Per Salberger, and Amos Turchet.
- Aug. 2012 *1st EU-US conference on Automorphic Forms and related topics.*
RWTH Aachen University, Jul. 30 to Aug. 10, 2012.
Organized jointly with Aloys Krieg, Olav Richter, and Lynne Walling.
- Mar. 2010 *AKLS Student Section.*
RWTH Aachen University, Mar. 3, 2010.
- Spring 2009 *Research Seminar on Borcherds Products.*
RWTH Aachen University, Apr. 1 to Jun. 30, 2009.

FURTHER EDUCATION

- Spring 2019 Course on Blended Learning and Digital Media in Higher Education.
- Spring 2019 Course on Diversity and Inclusion for Learning in Higher Education.
- Spring 2019 Course on Enhancing Learning through Writing.
- Fall 2018 Course on University Teaching and Learning.
- Fall 2015 Course on Supervision of Research.
- Aug. 2014 Workshop on gender aspects in higher education.
- May 2014 Workshop on communication techniques.
- Apr. 2011 Workshop on fund raising.
- Dec. 2009 Workshop on human resource management.
- Nov. 2008 Workshop on mentoring and motivation skills.
- Jul. 2008 Workshop on innovation management.
- Mar. 2007 Workshop on teaching skills, eloquence and leadership skills.

FURTHER QUALIFICATION

LANGUAGES	German: native; English: fluent; Swedish: fluent. Various other languages at basic to good level.
PROGRAMMING & SOFTWARE	Sage, Magma, Maple, Mathematica, LaTeX, C, C++, Julia, Python, Haskell.