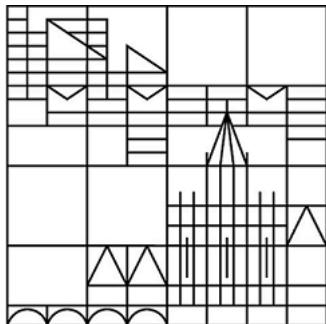


Universität Konstanz

Fachbereich Mathematik und Statistik

Prof. Dr. Salma Kuhlmann

Konstanz, November 04, 2024



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CURRICULUM VITAE

EDUCATION

- **Mathematische Fakultät, University of Heidelberg**, Germany,
Habilitation and Venia Legendi in Mathematics (June 1999)
- **Université Paris 7**, France,
Doctorat de Mathématiques (July 1991)
- **Université Paris 7**, France,
Diplome d'Etudes Approfondies en Mathématiques (June 1984)
- **McGill University**, Montreal, Canada,
Bachelor of Sciences: First Class Honours in Mathematics (June 1981)

POSITIONS

- **W3 Professur** (endowment: 2 positions) University of Konstanz, Germany (appointed July 2009)
- **Adjunct Professor** University of Saskatchewan, Canada (2009 - 2029)
- **Professor** (with tenure), University of Saskatchewan, Canada (July 2003 - July 2009)
- **Associate Professor** (with tenure), University of Saskatchewan, Canada (appointed July 1997)
- **Visiting Member** at the Fields Institute, Toronto, Canada (academic year 1996 - 1997)
- **Habilitation Fellow** of the German Research Foundation (1995 - 1997)
- **Visiting Professor** at the Panjab University, Chandigarh, India (1995)
- **Post-Doctoral Fellow** at the University of Heidelberg, Germany (1992 - 1994)
- **Graduate Assistant**, Mathematics Institute, University of Heidelberg, Germany (1988 - 1989)
- **Doctoral Fellow** of the French Government, University of Paris 7, France (1984 - 1987)

PROJECTS

- **AI to analyze Siloed and Diverse Record Formats in Real Time to Improve Public Safety Outcomes**

A proposal submitted in response to the Call for Proposals for Micro-nets (CFPMN) Challenge:
Lighting the Path with AI: Advanced analytics and decision support for first responders
The Department of National Defence (DND); Defence Research and Development Canada
(September 2024 - September 2027)

- **Connecting Statistical Logic, Dynamical Systems and Optimization**

Ausschuss für Forschungsfragen (AFF), Programm Netzwerkplattformen
im Rahmen der Exzellenzstrategie, University of Konstanz
(2024)

- **Positive Polynomials and formal Power Series**

Ausschuss für Forschungsfragen (AFF), University of Konstanz
(January 2024 - December 2025)

- **TENORS (Tensor Modeling, Geometry and Optimisation)**

with several european partners
European Commission: Call HORIZON-MSCA-2022-DN-01
Activity HORIZON-TMA-MSCA-DN-JD: MAT
(January 2024 - December 2027)

- **SVP (Simons Visiting Professors)**: Research visit Mareike Dressler
(March 2023)

- **OWRF (Oberwolfach Research Fellows)**

Infinite Dimensional Moment Problems in Sum of Squares Approach to Partial Differential Equations
with Didier Henrion, Maria Infusino and Victor Vinnikov
Mathematisches Forschungsinstitut Oberwolfach (MFO)
(March 19 - 25, 2023)

- **TRAGVAL (Topics in Real Algebraic Geometry and Valuation Theory)**

Ausschuss für Forschungsfragen (AFF), University of Konstanz
(January 2022 - December 2023)

- **POEMA (Polynomial Optimization, Efficiency through Moments and Algebra)**

with Bernard Mourrain (coordinator), Claus Scheiderer (local partner),
Markus Schweighofer (local coordinator) and other european participants
European Commission: Call H2020-MSCA-ITN-2018
Activity MSCA-ITN-ETN: MAT
(January 2019 - June 2023)

- **ALMA (Algebra, Logic, Moments and Applications)**

Ausschuss für Forschungsfragen (AFF), University of Konstanz
(January 2020 - December 2022)

- **Summer School in Tame Theory**
VW-Stiftung
(July 18, 2016 - July 23, 2018)
- **Doctoral Scholarship for Sebastian Krapp**
Carl-Zeiss-Stiftung
(July 01, 2016 - June 30, 2018)
- **Director of the Project “Konstanz Women in Mathematics (KWIM): paths in studies and career”**
University of Konstanz
(2013 - 2018)
- **SVP (Simons Visiting Professors): Research visit Raul Curto**
(March 2017)
- **Long Term Scholarship for Katharina Dupont**
MINERVA-Stiftung
(September 2013 - March 2014)
- **Scholarship for Eli Shamovich as PhD-Student at the University of Konstanz**
EDEN
(6 Months, 2013/2014)
- **SVP (Simons Visiting Professors): Research visit Bruce Reznick**
(March 2014)
- **Scholarship for Gil Keren as Master-Student at the University of Konstanz**
EDEN
(5 Months, 2013/2014)
- **Scholarship for Quentin Brouette as student assistant**
Ausschuss für Forschungsfragen (AFF)
(July - August 2013)
- **Short Term Scholarship for Katharina Dupont**
MINERVA-Stiftung
(March - April 2013)
- **Scholarship for Mehdi Ghasemi**
Ausschuss für Forschungsfragen (AFF)
(October - December 2012)
- **Scholarship for Isabella Fascitiello as student assistant**
Ausschuss für Forschungsfragen (AFF)
(November 2012)
- **“Internationale Forscherinnen in Konstanz” for Prof. Karen Lange**
Förderlinie 1, Gleichstellungsrat, University of Konstanz
(May 27 - June 11, 2012)

- **Research scholarship at the University of Konstanz for Prof. Dr. Paola D'Aquino**
German Academic Exchange Service (DAAD)
(1 Month, 2012)
- **“Brückenstipendium für Nachwuchswissenschaftlerinnen” for Charu Goel**
Förderlinie 3, Gleichstellungsrat, University of Konstanz
(November 01, 2010 - July 31, 2012)
- **Scholarship for Noa Lavi as student assistant**
Ausschuss für Forschungsfragen (AFF)
(October - December 2010)
- **“Internationale Forscherinnen in Konstanz” for Prof. Julia Knight**
Förderlinie 1, Gleichstellungsrat, University of Konstanz
(July 15 - July 20, 2010)
- **“Brückenstipendium für Nachwuchswissenschaftlerinnen” for Margaret Thomas**
Förderlinie 3, Gleichstellungsrat, University of Konstanz
(January 01 - June 30, 2010)

HONOURS and GRANTS

- **Forschungsinitiative “Real Algebraic Geometry and Emerging Applications”**
University of Konstanz via German Research Association (DFG)
(2010 - 2014)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
Discovery Grant
(2005 - 2010)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
Individual research grant
(2001 - 2005)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
Individual research grant
(1998 - 2001)
- **President's NSERC fund from the University of Saskatchewan**
(1997 - 1998)
- **Habilitation grant from the German Research Association (DFG)**
(1995 - 1997)
- **Research grant from the University of Heidelberg**
(1992 - 1994)

- **Ph.D. Fellowship from the French Government**
(1984 - 1987)
- **Graduate Grant** from Logic Research Fund of Professor Makkai, **McGill University** and
Scholarship from Government of Quebec
(1981 - 1982)
- **NSERC Undergraduate Summer Award**
(1980)
- **Prize:** "Morris W. Wilson Memorial Scholarship", **McGill University**
(1979)
- **Award:** "University Scholar" award by **McGill University Scholarships Committee**,
given to recognize outstanding academic achievements
(1979)

RESEARCH INTERESTS (in key words)

Mathematical logic, algebra, and analysis. I am working in: **model theoretic algebra** (o-minimal structures, saturated and recursively saturated o-minimal expansions), **model theory of valued fields** (ordered fields, fields of power series, dependent fields, exponential fields, Hardy fields, exponential-logarithmic power series fields, transexponential fields), **ordered algebraic structures** (lexicographic orderings, ordered vector spaces, Hahn groups), **models of arithmetic** (integer parts), **real algebraic geometry** (Positivstellensätze, moment Problems, symmetric positive polynomials). Further interest in: difference fields, differential fields, ordered permutation groups, geometric model theory, set theory.

PERSONAL INFORMATION

Date of Birth: May 08, 1958

Gender: Female

Citizenship: Egyptian and Canadian. Niederlassungserlaubnis in Germany.

Languages: Fluent in Arabic, French, English and German.

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Academic Assistants, University of Konstanz (since 2009)

- **Matteo Bechere** (since August 2024)
- **Gabriela Michalek** (October 2023 - September 2024)
- **Vincent Bagayoko** (November 2022 - July 2023)
Currently Post-doc at Université Paris Cité, France.
- **Lasse Vogel** (since June 2022)
- **Laura Wirth** (since April 2022)

- **Michele Serra** (2017 - 2023)
Currently Lecturer at TU Dortmund, Germany.
- **Moritz Schick** (since May 2021)
- **Sarah-Tanja Hess** (September 2020 - July 2024)
Currently employed in the risk control department of the Kantonalbank Basel, Switzerland.
- **Lothar Sebastian Krapp** (October 2019 - August 2024)
Currently Lecturer in the Mathematical Foundations of Language at the Department of Comparative Language Sciences, University of Zurich, Switzerland,
Researcher at NCCR Evolving Language, Switzerland
and Privatdozent with venia docendi for Mathematics at the University of Konstanz, Germany.
- **Hazel Brickhill** (October 2019 - September 2024)
- **Patrick Michalski** (January 2018 - December 2021)
Currently Software Developer at SEITENBAU, Konstanz, Germany.
- **Maria Infusino** (October 2014 - October 2020)
I supervised the Habilitation of Dr. Maria Infusino (2020).
Currently Tenure track Position at University of Cagliari, Sardinia, Italy.
- **Gabriel Lehéricy** (October 2014 - August 2017)
Currently Data Scientist in the Risk Modeling department at Santander Mönchengladbach, Germany.
- **Cédric Milliet** (September 2013 - September 2014)
- **Quentin Brouette** (June - July 2013)
- **Isabella Fascitiello** (November 2012)
- **Mehdi Ghasemi** (October - December 2012)
Currently Senior Scientist for the Edmonton Police Service, Edmonton, Alberta, Canada.
- **Merlin Carl** (August 2011 - August 2017)
I supervised the Habilitation of Dr. Merlin Carl (2017).
Currently Lecturer at Europa University Flensburg.
- **Simon Müller** (August 2016 - September 2020)
Currently Actuar at Viridium Group, Stuttgart, Germany.
- **Lorna Gregory** (2011 - 2013)
Currently Lecturer in Mathematics, School of Mathematics, University of East Anglia, Norwich, UK.
- **Andrew Dolphin** (August 2011)
Currently Post-doc at University of Antwerpen, Belgium.
- **Itay Kaplan** (July 2010 - July 2011)
Currently Lecturer at the Hebrew University, Jerusalem, Israel.
- **Noa Lavi** (October 2010 - December 2010)
- **Annalisa Conversano** (July 2009 - June 2011)
Currently Lecturer at Massey University, New Zealand.
- **Mickaël Matusinski** (July 2009 - July 2010)
Currently Maître de Conférences, University of Bordeaux, France.

- **Margaret Thomas** (October 2009 - January 2010)

Currently Assistant Professor, Purdue University, West Lafayette, Indiana, USA.

- Recruitment of two Post-Doctoral Fellows:

I recruited **Dr. Margaret Thomas** (2010 - 2016) and **Dr. Pantelis Eleftheriou** (2015 - 2021) for the Zukunftskolleg, for whom I am the mentor and the local host. Both were successful in acquiring third party funding (DFG).

Dr. Thomas is currently Assistant Professor at the Purdue University, Indiana, USA.

Dr. Eleftheriou obtained EPSRC early career fellowship and tenure-track position at the University of Leeds, UK, May 2021.

Post Doctoral Fellows, University of Saskatchewan (1997 - 2008)

- **Katarzyna Osiak**, visiting post-doctoral fellow (August - October 2008)

Currently assistant professor, University of Szczecin, Poland.

- **Mickaël Matusinski**, visiting post-doctoral fellow (March - September 2008)

Currently Maître de Conférences, University of Bordeaux, France.

- **Andreas Fischer**, visiting post-doctoral fellow (April 2006 - August 2008)

- **Antongiulio Fornasiero**, visiting post-doctoral fellow (January - March 2005)

Currently Assistant Professor, University of Florence, Italy.

- **Ulrich Hermlinsson**, visiting post-doctoral fellow (October 2004 - March 2005)

- **Roland Auer**, co-supervised (2002 - 2003)

Currently holds a position at Robert-Bosch-Gesamtschule, Göttingen, Germany.

- **Jaka Cimpric**, co-supervised, Cimpric was a NATO PDF (2001 - 2003)

Currently professor, University of Ljubljana, Slovenia.

- **Mikhail Kotchetov**, co-supervised (2002 - 2003)

Currently professor Memorial University, New Foundland, Canada.

- **M. El Bachraoui**, visited upon invitation (April 2003)

Currently professor at United Arab Emirates University, Al-Ain, United Arab Emirates.

- **Matthias Aschenbrenner** visiting post-doctoral fellow (March 2001)

Currently Director of Kurt Gödel Research Center for Mathematical Logic,
University of Vienna, Austria.

- **Marcus Tressl** visiting post-doctoral fellow (March - May 2002)

Currently lecturer, University of Manchester, UK.

Graduate Students: Bachelor

- **Salisha Baiz**, B. Sc. Thesis [125], University of Konstanz (May 2024)

- **Thomas Ryan Purdy**, B. Sc. Thesis [126], University of Saskatchewan (discontinued)

- **Jannike Berger**, Bachelor-Thesis Lehramt [128], University of Konstanz (September 2023)

- **Alina Jankowsky**, B. Sc. Thesis [129], University of Konstanz (May 2023)

- **David Kattermann**, B. Sc. Thesis [130], University of Konstanz (March 2023)
- **Heike Riedinger**, Bachelor-Thesis Lehramt [133], University of Konstanz (May 2022)
- **Dustin Richter**, Bachelor-Thesis Lehramt [135], University of Konstanz (October 2021)
- **Jakob Everling**, B. Sc. Thesis [140], University of Konstanz (December 2020)
- **Laura Wirth**, B. Sc. Thesis [145], University of Konstanz (December 2019)
- **Ruben Gehr**, B. Sc. Thesis [149], University of Konstanz (November 2018)
- **Sarah-Tanja Hess**, B. Sc. Thesis [150], University of Konstanz (November 2018)
- **Pia Steinmeyer**, B. Sc. Thesis [156], University of Konstanz (April 2018)
- **Moritz Schick**, B. Sc. Thesis [157], University of Konstanz (March 2018)
- **Patrick Michalski**, B. Sc. Thesis [169], University of Konstanz (October 2014)
- **Lisa Vogt**, B. Sc. Thesis [172], University of Konstanz (March 2011)
- **Fabian Parsch**, B. Sc. Thesis [173], University of Konstanz (October 2010)
Currently Assistant Professor, University of Toronto, Canada.
- **Markus Schachtner**, B. Sc. Thesis [174], University of Konstanz (October 2010)
- **Martin Rapp**, B. Sc. Thesis [175], University of Konstanz (August 2010)

Graduate Students: Master

- **Tim Störkle**, M. Ed. Thesis [127], University of Konstanz (January 2024)
- **Laura Wirth**, M. Sc. Thesis [136], University of Konstanz (January 2022)
- **Sophia-Elena Mauch**, M. Sc. Thesis [134], University of Konstanz (November 2021)
- **Leonhard Nenno**, M. Sc. Thesis [139], University of Konstanz (December 2020)
- **Moritz Link**, M. Sc. Thesis [141], University of Konstanz (December 2020)
- **Sarah-Tanja Hess**, M. Sc. Thesis [142], University of Konstanz (September 2020)
- **Moritz Schick**, M. Sc. Thesis [143], University of Konstanz (August 2020)
- **Johanna Bohlken**, M. Sc. Thesis [144], University of Konstanz (June 2020)
- **Lukas Gerlach**, Zulassungsarbeit für Lehramt [146], University of Konstanz (November 2019)
- **Johannes Karl-Heinz Fahrner**, Zulassungsarbeit für Lehramt [147],
University of Konstanz (November 2019)
- **Daria Lucia Janocha**, Zulassungsarbeit für Lehramt [148], University of Konstanz (October 2019)
- **Ruben Gehr**, Zulassungsarbeit für Lehramt [149], University of Konstanz (November 2018)
- **Isaac Ayoolo Jinadu**, M. Sc. Thesis [159], University of Saskatchewan (September 2017)
- **Patrick Michalski**, M. Sc. Thesis [158], University of Konstanz (November 2017)
- **Sophie Linnea Gütlein**, M. Sc. Thesis [160], University of Konstanz (December 2016)
- **Natalia Walder**, M. Sc. Thesis [161], University of Konstanz (July 2016)
- **Siqi Yao**, M. Sc. Thesis [162], University of Konstanz (February 2016)
- **Sebastian Loeffler**, Zulassungsarbeit für Lehramt [163], University of Konstanz (February 2016)
- **Renate Kiefer**, Zulassungsarbeit für Lehramt [164], University of Konstanz (February 2016)

- **Johanna Harde**, M. Sc. Thesis [171], University of Konstanz (October 2011)
- **Manuela Haias**, co-supervised M. Sc. Thesis [176], University of Saskatchewan (2004 - 2007)
- **Wei Fan**, co-supervised M. Sc. Thesis [177], University of Saskatchewan (2004 - 2006)
- **Jonathan Lee**, University of Saskatchewan (2003 - 2005)
- **Trevor Green**, M. Sc. Thesis [178], University of Saskatchewan (2000 - 2002)
- **Hyunku Chun**, M. Sc. Thesis [179], University of Saskatchewan (1999 - 2001)

Graduate Students: Diplom

- **Peter Ulber**, Diplom-Arbeit [165], University of Konstanz (December 2015)
- **Arve Gengelbach**, Diplom-Arbeit [168], University of Konstanz (October 2014)

Graduate Students: Doctor

- **Sami Halaseh**, co-supervising Ph.D. Thesis [123], University of Konstanz, University of Toulouse Paul Sabatier (since October 2024)
- **Matteo Bechere**, supervising Ph.D. Thesis [124], University of Konstanz (since August 2024)
- **Lasse Vogel**, supervising Ph.D. Thesis [131], University of Konstanz (since September 2022)
- **Laura Wirth**, supervising Ph.D. Thesis [132], University of Konstanz (since July 2022)
- **Sarah-Tanja Hess**, supervising Ph.D. Thesis [137], University of Konstanz (October 2024)
- **Moritz Schick**, supervising Ph. D. Thesis [138], University of Konstanz (since October 2020)
- **Patrick Michalski**, co-supervised Ph. D. Thesis [151], University of Konstanz (November 2021)
- **Michele Serra**, supervised Ph.D. Thesis [152], University of Konstanz (November 2021)
- **Simon Müller**, Ph.D. Thesis [153], University of Konstanz (July 2020)
- **Lothar Sebastian Krapp**, Ph.D. Thesis [154], University of Konstanz (November 2019)
- **Gabriel Lehéricy**, Ph.D. Thesis [155], co-supervised with University Paris 7 Denis-Diderot, (September 2018)
- **Katharina Dupont**, Ph.D. Thesis [166], University of Konstanz (February 2015)
- **Charu Goel**, Ph.D. Thesis [167], University of Konstanz (August 2014)
- **Mehdi Ghasemi**, Ph.D. Thesis [170], University of Saskatchewan (September 2012)
- **Tim Netzer**, visiting pre-doctoral fellow, University of Saskatchewan (May - September 2007)
- **Pawel Gladki**, Ph.D. Thesis, co-supervised, University of Saskatchewan (2004 - 2007)
- **Mahdi Zekavat**, Ph.D. Thesis, co-supervised [180], University of Saskatchewan (1997 - 2000)

NSERC Summer Undergraduate Awardees - University of Saskatchewan

- **Michael Hancock**, supervised [181] (Summer 2005)
- **Jonathan Lee**, supervised [182] (Summer 2003)
- **Brian Danchilla**, supervised [183] (Summer 2003)
- **Jonathan Lee**, supervised [184] (Summer 2002)
- **Chira Chilliack**, co-supervised [185] (Summer 2000)
- **Amy Mader**, co-supervised [186] (Summer 1999)
- **Chris Arbuthnott**, co-supervised [187] (Summer 1999)
Later completed M. Sc. in Mathematics, University of Waterloo, Canada

TEACHING RECORD (selected)

At the University of Bordeaux

- Mini-Course: Real closed fields and models of peano arithmetic
(September 10 - September 28, 2018)

At the University of Konstanz (since 2009)

- Algebraic Geometry (Course, 9 ECTS)
- Algebraic Number Theory (Course, 9 ECTS)
- P-adische Zahlen (Seminar, 3 ECTS)
- Lineare Algebra II (Course, 9 ECTS)
- Modelltheorie (Seminar)
- Lineare Algebra I (Course, 9 ECTS)
- p-adically Closed Fields (Seminar, 6 ECTS)
- Modelltheorie (Course, 9 ECTS)
- Stabilitätstheorie (Seminar, 6 ECTS)
- Topologische Gruppen (Seminar, 5 ECTS)
- Bewertete Körper (Course, 9 ECTS)
- Infinitäre Logik mit Anwendungen (Seminar, 6 ECTS)
- Matrizengruppen (Proseminar, 4 ECTS)
- Positive Polynome (Course, 9 ECTS)
- Algebra, Analysis und Geometrie in o-minimalen Strukturen (Seminar, 6 ECTS)
- Asymptotische Analysis (Seminar, 4 ECTS)
- Reelle Algebraische Geometrie (Course, 9 ECTS)
- Einführung in die asymptotische Analysis (Proseminar, 4 ECTS)
- Einführung in die o-minimale Geometrie (Seminar, 6 ECTS)

At the University of Saskatchewan (1997 - 2009)

- Linear Algebra Math 266 (for honours students) (3 cu)
- Linear Algebra Math 264 (3 cu)
- Algebra Math 360 (for honours students, 6 cu): group theory, ring theory, field theory
- Algebra Math 862 (for graduate students, 3 cu): Galois Theory
- Number Theory Math 364 (3 cu)
- Linear Algebra and Geometry Math 358 (6 cu)
- Real Analysis Math 371 (for honours students, 3 cu)
- Topics in Algebra Math 872 (graduate students, 6cu): Ordered Exponential Fields.
- Abstract Algebra Math 363 (3 cu)
- Calculus Math 101 (3cu)
- Calculus for Pharmacy Math 115 (3cu)
- Topics in Algebra Math 872 (graduate students and faculty, 6cu): Ordered Structures
- Calculus Math 116; Integration Theory (3cu)
- Calculus Math 110; Differential Calculus (3cu)
- Linear Algebra II Math 366 (3 cu)

COMMITTEE WORK (selected)

- **Prodekanin der Mathematisch-Naturwissenschaftlichen Sektion**
University of Konstanz (from October 2024)
- **Ansprechperson für Gleichstellung und Diversity
für den Fachbereich Mathematik und Statistik**
University of Konstanz (from October 2023)
- **Fachbereichssprecherin des Fachbereichs Mathematik und Statistik**
University of Konstanz (from October 2023)
- **Mitglied des Fachbereichsrats Mathematik und Statistik,**
University of Konstanz (October 2022 - September 2023)
- **Mitglied der Studienkommission Mathematik,**
University of Konstanz (October 2022 - March 2023)
- **Gleichstellungsbeauftragte University of Konstanz** (2016 - 2017)
- **Stellvertreterin der Hochschullehrerin im Gleichstellungsrat**
University of Konstanz (2015 - 2016)
- **Internal Scientific Advisory Board Zukunftskolleg**
(Vertreterin des Fachbereichs Mathematik und Statistik)
University of Konstanz (since January 2015)
- **Pro-Dekan der mathematisch-naturwissenschaftlichen Sektion**
University of Konstanz (2014 - 2016)
- **Fachbereichssprecherin des Fachbereichs Mathematik und Statistik**
University of Konstanz (October 2014 - September 2016)
- **Association for Symbolic Logic Committee for Logic in Africa** (2014 - 2016)
- **Auswahlkommission Fellowships Zukunftskolleg**
University of Konstanz (since September 2012)
- **Fachbereichsrat Mathematik und Statistik**
University of Konstanz (2012- 2019)
- **Ausschuss für Forschungsfragen**
University of Konstanz (October 2010 - 2012)
- **Association for Symbolic Logic in Europe Committee** (2010 - 2016)
- **NSERC Banting Post-Doctoral Fellowships Ottawa**
Selection Committee (2010 - 2013)
- **NSERC Grant Selection Committee 336**
in Pure Mathematics; Member (2005 - 2008)
- **Association for Symbolic Logic**
(<http://aslonline.org/>): Member of Program Committee for the annual meeting held in Montreal (May 17 - 21, 2006)
- **European Network “Real Algebraic and Analytic Geometry”**
Local Coordinator for the Canadian Team application (2000 - 2002)

- **College of Reviewers Canada Research Chairs Program**
Member (2002 - 2003)
- **College Graduate Studies & Research**
Faculty representative, U of S Council
University of Saskatchewan (2002 - 2003)
- **Director; University Math Help Centre**
University of Saskatchewan (2001 - 2003)
- **Colloquium Chair**
University of Saskatchewan (1997 - 2003)
- **Member of College of Arts and Science Equity Committee**
University of Saskatchewan (2000 - 2003)
- **University of Saskatchewan Faculty Association**
Member of the Committee on Women issues (2002 - 2003)

CONFERENCE ORGANIZATION (selected)

- **Tame geometry conference**
Thematic Month: Singularities, differential equations, transcendence Scientific committee: Gal Binyamini, Rehovot - Raf Cluckers, Lille - Salma Kuhlmann, Konstanz - Olivier Le Gal, Chambéry - Lou van den Dries, Urbana-Champaign
Centre international de rencontres mathématiques (CIRM)
Marseille, France (February 10 - 14, 2025)
- Special session: **Finite and Infinite Dimensional Moment Problems**
International Workshop on Operator Theory and its Applications (IWOTA)
Organizers: Maria Infusino, Cagliari - Salma Kuhlmann, Konstanz
University of Kent, Canterbury, UK (August 12 - 16, 2024)
- **Workshop Exponential Fields**
Banff International Research Station for Mathematical Innovation and Discovery
Organizers: Adele Padgett, Hamilton - Sebastian Eterovic, Leeds - Salma Kuhlmann, Konstanz
Banff Centre, Alberta, Canada (February 04 - 09, 2024)
- **48th International Symposium on Symbolic and Algebraic Computation (ISSAC)**
Member of program committee: Salma Kuhlmann, Konstanz
Organizers: Alicia Dickenstein, Buenos Aires - Elias Tsigaridas, Paris
Tromsø, Norway (July 24 - 27, 2023)
- **Minisymposium Moment Problems, Convex Algebraic Geometry, and Semidefinite Relaxations**
SIAM Conference on Applied Algebraic Geometry (AG23)
Organizers: Didier Henrion, Toulouse and Prague - Maria Infusino, Cagliari - Salma Kuhlmann, Konstanz - Victor Vinnikov, Be'er Sheva
Technische Universiteit Eindhoven, Netherlands (July 10 - 14, 2023)

- **Real Algebraic Geometry with a View toward Koopman Operator Methods**
Organizers: Didier Henrion, Toulouse - Salma Kuhlmann, Konstanz - Igor Mezic, Santa Barbara - Victor Vinnikov, Be'er Sheva
Mathematisches Forschungsinstitut Oberwolfach, Germany (March 12 - 18, 2023)
- **Donau-Rhein Modelltheorie und Anwendungen (DRMTA)**
Organizers: Philipp Habegger, Basel - Amador Martin-Pizarro, Freiburg - Salma Kuhlmann, Konstanz - Tobias Kaiser, Passau
University of Passau, Germany (February 14 - 15, 2023)
- **Colloquium Logicum**
of the Deutsche Vereinigung für Mathematische Logik und für Grundlagenforschung der Exakten Wissenschaften (DVMLG)
Conference for the 60th anniversary of the foundation of the DVMLG
Local Organizers: Carolin Antos, Konstanz - Neil Barton, Konstanz - Salma Kuhlmann, Konstanz (Chair)
University of Konstanz, Germany (September 26 - 28, 2022)
- **25th International Symposium on Mathematical Theory of Networks and Systems (MTNS)**
Session: **Moment Problems, Convex Algebraic Geometry, and Semidefinite Relaxations**
Organizers: Didier Henrion, Toulouse - Maria Infusino, Cagliari - Salma Kuhlmann, Konstanz - Victor Vinnikov, Be'er Sheva
University of Bayreuth, Germany (September 12 - 16, 2022)
- **Minisymposium in European Women in Mathematics General Meeting 2022**
Real Algebraic Geometry in Action with a view toward Optimization
Organizers: Charu Goel, Nagpur - Salma Kuhlmann, Konstanz
Aalto University, Finland (August 22 - 26, August)
- **Workshop on Tame Geometry:**
Interactions Between O-minimal, Complex Analytic and Nonarchimedean Methods
Organizers: Georges Comte, Chambéry - Salma Kuhlmann, Konstanz - Fernando Sanz Sánchez, Valladolid
Fields Institute, Toronto, Canada (June 06 - 10, 2022)
- **Real Algebraic Geometry with a View Toward Hyperbolic Programming and Free Probability**
Organizers: Didier Henrion, Toulouse - Salma Kuhlmann, Konstanz - Roland Speicher, Saarbrücken - Victor Vinnikov, Be'er Sheva
Mathematisches Forschungsinstitut Oberwolfach, Germany (March 01 - 07, 2020)
- **Donau-Rhein Modelltheorie und Anwendungen (DRMTA), 5th Meeting**
Organizers: Philipp Habegger, Basel - Tobias Kaiser, Passau - Salma Kuhlmann, Konstanz - Amador Martin-Pizarro, Freiburg
University of Konstanz, Germany (January 24, 2020)
- **Philosophy of Set Theory and Foundations**
Organizers: Carolin Antos, Konstanz - Salma Kuhlmann, Konstanz
University of Konstanz, Germany (August 01, 2019)

- **Truncated Moment Problem**

Organizers: Maria Infusino, Konstanz - Salma Kuhlmann, Konstanz
Instituto Superior Técnico, Lisboa, Portugal (July 22 - 26, 2019)

- **Konstanz Women in Mathematics (KWIM) - KWIM-Festtage**

Celebrating the end of the KWIM-Project
Organizers: Maria Infusino, Konstanz - Salma Kuhlmann, Konstanz
University of Konstanz, Germany (December 06 - 07, 2018)

- **Real Algebraic Geometry and Model Theory (RAGMT)**

Organizers: Lothar Sebastian Krapp, Konstanz - Gabriel Lehéricy, Paris - Patrick Michalski, Konstanz - Simon Müller, Konstanz - Michele Serra, Konstanz
University of Konstanz, Germany (October 08 - 09, 2018)

- **Mini-Symposium: Real Geometry in Action**

during "European Women in Mathematics General Meeting 2018"
Organizers: Maria Infusino, Cagliari - Salma Kuhlmann, Konstanz
Graz, Austria (September 2018)

- **Donau-Rhein Modelltheorie und Anwendungen (DRMTA)**

Organizers: Philipp Habegger, Basel - Amador Martin-Pizarro, Freiburg - Tobias Kaiser, Passau - Lothar Sebastian Krapp, Konstanz - Salma Kuhlmann, Konstanz - Margaret Thomas, Konstanz
University of Konstanz, Germany (May 2017)

- **Mathematisches Forschungsinstitut Oberwolfach**

Workshop: **Real Algebraic Geometry with a view toward Moment Problems and Optimization**
Organizers: Didier Henrion, Toulouse - Maria Infusino, Cagliari - Salma Kuhlmann, Konstanz - Victor Vinnikov, Be'er Sheva
Mathematisches Forschungsinstitut Oberwolfach, Germany (March 2017)

- **Mini-Workshop: Surreal Numbers, Surreal Analysis, Hahn Fields and Derivations**

Organizers: Alessandro Berarducci, Pisa - Philip Ehrlich, Athens - Salma Kuhlmann, Konstanz
Mathematisches Forschungsinstitut Oberwolfach, Germany (December 2016)

- **Department of Mathematics and Statistics, University of Saskatchewan**

The nineteenth Colloquiumfest - Dedicated to Murray Marshall

Organizers: Mehdi Ghasemi, Saskatoon - Franz-Viktor Kuhlmann, Saskatoon - Salma Kuhlmann, Konstanz - Victor Vinnikov, Be'er Sheva
University of Saskatchewan, Canada (August 2016)

- **IWOTA 2016 Special Session: Finite and infinite dimensional moment problems**

Organizers: Maria Infusino, Konstanz - Tobias Kuna, Reading
Washington University, St. Louis, USA (July 2016)

- **Summer School in Tame Geometry**

Organizers: Pantelis Eleftheriou, Konstanz (Chair) - Salma Kuhlmann, Konstanz - Jonathan Pila, Oxford - Daniel Plaumann, Konstanz - Margaret Thomas, Konstanz
University of Konstanz, Germany (July 2016)

- **Andrejeweski-Tage 2016 Moment problems in theoretical physics**

Organizers: Sergio Albeverio, Bonn - Maria Infusino, Konstanz - Salma Kuhlmann, Konstanz
<https://cms.uni-konstanz.de/fileadmin/archive/andrejewski/math/andrejewski-tage/>
University of Konstanz, Germany (April 2016)

- **DMV-Jahrestagung 2015**

Mini-Symposium **Moment Problem and Applications**

Organizers: Maria Infusino, Konstanz - Salma Kuhlmann, Konstanz - Tobias Kuna, Reading
<http://www.math.uni-hamburg.de/DMV2015/acceptedminisymposia.html>
University of Hamburg, Germany (September 2015)

- **Tagung: Konstanz Women in Mathematics 2015**

Organizers: Charu Goel, Konstanz - Salma Kuhlmann, Konstanz
<http://cms.uni-konstanz.de/math/kwim-2/>
University of Konstanz, Germany (June 2015)

- **Workshop on Real Algebraic Geometry With A View Toward Systems Control and Free Positivity**

Organizers: Didier Henrion, Toulouse - Salma Kuhlmann, Konstanz - Victor Vinnikov, Be'er Sheva
<http://www.mfo.de/scientific-program/meetings>
Mathematisches Forschungsinstitut Oberwolfach, Germany (April 2014)

- **DAAD conference: Naples - Konstanz: Model Theory Days**

Organizers: Paola D'Aquino, Napoli - Salma Kuhlmann, Konstanz
<http://cms.uni-konstanz.de/nkmtd/>
Funded by Bundesministerium für Bildung und Forschung
Naples, Italy (November 06 - 08, 2013)

- **DAAD conference: Konstanz - Naples: Model Theory Days**

(Konstanz December 2012) Organizers: Paola D'Aquino, Napoli - Salma Kuhlmann, Konstanz
<http://cms.uni-konstanz.de/knmtd/>
Funded by Bundesministerium für Bildung und Forschung
University of Konstanz, Germany (December 06 - 08, 2012)

- **Workshop on Differential Kaplansky Theory**

Organizers: Salma Kuhlmann, Konstanz - Mickael Matusinski, Bordeaux
<http://www.fields.utoronto.ca/programs/scientific/08-09/o-minimal/miniworkshops/>
Fields Institute, Toronto, Canada (April 2009)

- **Workshop on Positive Polynomials and Optimization**

Organizers: Salma Kuhlmann, Konstanz - Sanjay Lall, Stanford - Vicki Powers, Atlanta - Frank Sottile, Texas
<http://www.math.tamu.edu/~frank.sottile/conferences/Banff06/06w5060.html>
Banff International Research Station, Banff, Canada (October 2006)

- **Mini-Conference Topics in Real Algebraic Geometry**

Dedicated to Professor Danielle Gondard, on the occasion of her 60th Birthday
<https://math.usask.ca/~skuhlman/confgond.htm>
Saskatoon, Canada (October 2006)

- **Sixth Annual Colloquiumfest on Positivity, the Multi-Dimensional Moment Problem and Noncommutative Real Geometry**
Saskatoon, Canada (April 2005)
- **Fourth Annual Colloquiumfest on Model Theory and Ordered Algebraic Structures**
For list of speakers and program see <http://math.usask.ca/fvk/mb4.htm>
Saskatoon, Canada (March 2003)
- **Saskatchewan Mini-meeting**
For list of speakers and program see <http://math.usask.ca/fvk/skantm2.htm>
Saskatoon, Canada (2003)
- **Saskatchewan Algebra and Number Theory Mini-meeting**
(Regina, 2002) – Organizers: Allen Herman, Regina - Salma Kuhlmann, Saskatoon
University of Regina, Canada (September 2002)
- **Third Annual Colloquiumfest in Algebraic Geometry, Real Algebraic Geometry and Computational Algebra**
For list of speakers and program see <http://math.usask.ca/fvk/Mb3.htm>
Saskatoon, Canada (March 2002)
- **CMS Summer Meeting 2001 in Saskatoon - Session on Model Theoretic Algebra**
Organizers: Bradd Hart, Toronto - Franz-Viktor Kuhlmann, Saskatoon - Salma Kuhlmann, Saskatoon
<https://math.usask.ca/fvk/cmsinfo.htm> Saskatoon, Canada (Summer 2001)
- **Second Annual Colloquiumfest in Real Algebraic Geometry and Model Theory**
For list of speakers and program see <http://math.usask.ca/fvk/Mb2.htm>
Saskatoon, Canada (March 2001)
- **First Annual Colloquiumfest**
For list of speakers and program see <http://math.usask.ca/fvk/Mb.htm>
Saskatoon, Canada (March 2000)
- **International Conference and Workshop on Valuation Theory**
For list of speakers and program see <http://math.usask.ca/fvk/annconf.html>
Sponsors: Fields, CRM and PIMS, U of S.
Saskatoon, Canada (1999)
With the Conference and Valuation Theory Home Pages that we created, it has put Saskatoon on the map as the center for Valuation Theory.

RESEARCH SEMINARS AND WORKSHOPS (selected)

- **Graduate Mini-Course on Moment Problems**, upon invitation,
Program on Inverse Moment Problem, Institut for Mathematical Sciences,
National University of Singapore (November 11, 2013 - January 25, 2014)
- **Arbeitsgruppe: Dependent Fields and Definable Valuations**
University of Konstanz (Winter 2010 - 2011)

- **Oberseminar Complexity Theory, Model Theory, Set Theory**
since 2010, University of Konstanz
- **Oberseminar Reelle Geometrie und Algebra**
University of Konstanz (since 2009)
- **Minicourse on “Positive Polynomials and the multi-dimensional Moment Problem”**,
Upon invitation, Weizmann Institute, Israel (July 2008)
- **Mini-course on “Hilbert’s 17th Problem and Positive Polynomials”**, Invited Professor
Université Paris 6, France (October 2006)
- **Mini - course on “Positive Polynomials and the Moment Problem”**
Centre Emile Borel, Institut Henri Poincaré, Paris, France (Fall 2005)
- **Groupe de Travail “o-minimalité, Transséries et Modèles non-Archimédiens”**
Co-organized with Professor J.-P. Ressayre, (2003 - 2004, resumed October - December 2007)
- **Seminar on Hardy Fields** (2002 - 2004)
- **The Algebra and Logic Seminar**
Main topics: Model Theoretic Algebra and Real Algebraic Geometry
For more information see <http://math.usask.ca/fvk/algsem.htm>
For list of speakers see <https://math.usask.ca/fvk/alggtalk.htm>.
University of Saskatchewan, Canada (since 1997)
- **Mathematical Sciences Group Colloquium Series**
<http://math.usask.ca/fvk/colloqg8.htm>).
The aim was to bring mathematicians (in particular, logicians) and computer
scientists together, by inviting talks on topics of interest to both groups.
University of Saskatchewan, Canada (2001 - 2003)
- **Cryptography Student Seminar**
for students in mathematics and computer science organized with R. Auer
University of Saskatchewan, Canada (Summer 2002)
- **Geometric Algebra seminar**
My graduate students lectured on Artin’s book (1999-2000)
- **Seminar on Sturm Algebra** (Summer 1999)
For my undergraduate NSERC Students. University of Saskatchewan, Canada (Summer 1999)
- **Seminar on Quasicrystals**
Invited Prof. Moody, Prof. Weiss, Prof. Baake (May 1999)
- **Mini-Course on Algebra and Model Theory of Exponential Fields**
Louisiana State University, Baton Rouge, USA (Spring 1996)
- **Model Theory**
Co-organized with Prof. Gloede, University of Heidelberg, Germany (1995)
- **Exponential Fields**
Co-organized with Prof. Roquette, University of Heidelberg, Germany (1993 - 1994)

RESEARCH VISITS (selected)

- **Institut Henri Poincaré**, Invited to participate to the *Thematic Program Trimester Model Theory, Combinatorics and Valued Fields*, France (January 08 - April 06, 2018)
- **Instituto Tecbikiguci de Oaxaca**, *Algebraic Geometry Session*, Mexico (September 07 - 11, 2015)
- **University of Tbilisi**, IWOTA 2015, Georgia (July 06 - 10, 2015)
- **Schloss Rauischholzhausen**, European Women in Mathematics German Chapter, Germany (April 30 - May 02, 2015)
- **University of Amsterdam**, IWOTA 2014, The Netherlands (July 2015)
- **Nanyang Technological University Singapore**, *Program on Inverse Moment Problems*, Singapore (January 06 - 18, 2014)
- **Université de Mons**, Belgium (November 18 - 25, 2013)
- **University of Bordeaux**, France (May 27 - June 02, 2013)
- **Université Paris 7**, France (November 2012)
- **Ben Gurion University of the Negev**, Israel (several visits in 2009, 2010, 2011, 2012)
- **Seconda Università degli Studi di Napoli**, Italy (September 30 - October 15, 2012, April 01 - 08, 2011)
- **University of Bordeaux**, Bordeaux, France (April 30 - May 06, 2012)
- **Institut Henri Poincaré**, Paris, France (February 27 - March 05, 2012)
- **Universität Münster**, Münster, Germany (April 27 - May 01, 2011)
- **Panjab University**, Chandigarh, India (March 2009)
- **The Fields Institute**, Invited to participate to the *Thematic Program on o-minimal structures and real analytic geometry*, Toronto, Canada (January - July 2009)
- **Sabbatical Leave**, University of Ljubljana, Slovenia and **Equipe de Logique**, CNRS, Université Paris 7, and LAAS, Toulouse, France (July - December 2007)
- **Newton Institute**, Invited to participate to the Model theory research semester, University of Cambridge, UK (Spring 2005)
- **Centre Emile Borel**, “Invited Professor” to the *research trimester Real Geometry*, Paris, France (September 12 - December 16, 2005)
- **Institut Henri Poincaré**: I have been asked to give a course on *Positive Polynomials and the Moment Problem*. Paris, France
- **University of Norwich**, Invited by Prof. M. Dzamonja, Norwich, UK (May 2005)
- **Sabbatical Leave**, Equipe de Logique, CNRS, Université Paris 7, France (September 2003 - July 2004)
- **Universidad Autonoma Madrid**, invited by Prof. M. Otero, Madrid, Spain (One week in November 2003)
- **University of Ljubljana**, invited by J. Cimplic, Ljubljana, Slovenia (Two weeks in January 2004)
- **University of Regensburg**, invited by M. Tressl, Regensburg, Germany (One week in February 2004)
- **University of Bonn**, invited by Prof. Koepke, Bonn, Germany (Two weeks in May 2004)

- **TU Darmstadt**, invited by Prof. K. Keimel, Darmstadt, Germany (One week in July 2003)
- **Fields Institute**, *Set Theory and Analysis Program*, Toronto, Canada (One week in Fall 2002)
- **Rutgers University**, invited by Prof. S. Shelah, New Jersey, USA (One week in October 2001)
- **Département de Mathématiques, Université du Maine**, invited by Prof. Giraudet, Le Mans, France, (One week in June 1998)
- **Mathematical Sciences Research Institute**, Visiting Member for *Model Theory of Fields* Program, Berkeley, USA (May - June 1998)
- **Fields Institute**, Visiting Member *Emphasis Year on Algebraic Model Theory: Geometric Model Theory, and Model Theory of Analytic Functions* Toronto, Canada (1996 - 1997)
- **Louisiana State University**, Participant *Special Semester on Real Algebraic Geometry and Ordered Algebraic Structures*, Baton Rouge, USA (Spring 1996)
- **Bowling Green University**, invited by Profs. C. Holland & S. McCleary (One week in 1995)
- **Tata Institute**, invited by Prof. Parimala, Bombay, India (1 week in March 1995)
- **Panjab University**, invited by Prof. Sankaran and Prof. Khanduja, Chandigarh, India
(Three months research visit)

RESEARCH VISITORS (selected)

At the University of Konstanz (since July 2009)

- **Victor Vinnikov**, Ben Gurion University of the Negev (academic year 2024/2025)
- **Floris Vermeulen**, KU Leuven (academic year 2023/2024)
- **Anna de Mase**, Università degli Studi della Campania (academic year 2023/2024)
- **Wolfgang Bertram**, Université de Lorraine (academic year 2023/2024)
- **Maria Infusino**, University of Cagliari (academic year 2023/2024)
- **Paulina Radecka**, Academy of Sciences of the Czech Republic (academic year 2022/2023)
- **Mareike Dressler**, University of New South Wales (academic year 2022/2023)
- **Daniel Panazzolo**, Université de Haute-Alsace (academic year 2022/2023)
- **Manfred Droste**, University of Leipzig (academic year 2019/2020)
- **Arthur Forey**, ETH Zürich (academic year 2018/2019)
- **Lorenzo Galeotti**, University of Amsterdam (academic year 2018/2019)
- **Martin Goldstern**, Technische Universität Wien (academic year 2018/2019)
- **Menachem Kojman**, Ben Gurion University, Ber Sheva (academic year 2018/2019)
- **Nikolaas Verhulst**, University of Dresden (academic year 2017/2018)
- **Didier Henrion**, LAAS-CNRS, University of Toulouse (academic year 2017/2018)
- **Deirdre Haskell**, McMaster University Ontario (academic year 2016/2017)
- **Dr. Walter Craig**, McMaster University Ontario (academic year 2016/2017)
- **Didier Henrion**, LAAS-CNRS, University of Toulouse (academic year 2016/2017)

- **Raúl Curto**, University of Iowa (academic year 2016/2017)
- **Alessandro Berarducci**, Università di Pisa (academic year 2016/2017)
- **Pawel Gladki**, Uniwersytet Śląski, Katowice/Akademia Gorniczo-Hutnicza (academic year 2016/2017)
- **David Bradley-Williams**, Heinrich-Heine-University Düsseldorf (academic year 2016/2017)
- **Lorenzo Galeotti**, University of Hamburg (academic year 2015/2016)
- **Pablo Cubides**, Université de Caen Normandie (academic year 2015/2016)
- **Mikaël Matusinski**, Université de Bordeaux (July 2015, July 2011, October 2010)
- **Paola D'Aquino**, Seconda Università di Napoli (June 2015, January 2015, June 2012, February 2012, May 2011, October 2010)
- **Sandra Lang**, Technische Universität Darmstadt (academic year 2014/2015)
- **Françoise Point**, Mons, Belgium (May 2015, July 2011, June 2010)
- **Samaria Montenegro**, Université Paris Diderot (academic year 2014/2015)
- **Murray Marshall**, University of Saskatchewan (academic year 2014/2015)
- **Serge Randriambololona**, Galatasaray Üniversitesi (academic year 2014/2015)
- **Florian Pausinger**, Technische Universität München (academic year 2014/2015)
- **Arthur Paul Pedersen**, Max-Planck-Institut für Bildungsforschung Berlin (academic year 2013/2014)
- **William Anscombe**, University of Oxford (academic year 2012/2013)
- **Pantelis Eleftheriou**, University of Waterloo, Canada (academic year 2012/2013)
- **Krysztof Krupinski**, Uniwersytetu Wrocławskiego, Polen (academic year 2012/2013)
- **Artem Chernikov**, Hebrew University of Jerusalem (academic year 2012/2013)
- **Maurice Chiodo**, University of Melbourne (academic year 2012/2013)
- **Tamara Servi**, Centro de Matemática e Aplicações Fundamentais, Lissabon (academic year 2012/2013)
- **Zoe Chatzidakis**, Equipe le Logique Mathématique, Paris 7 (academic year 2011/2012)
- **A. Hasson**, Ben Gurion, Israel (academic year 2011/2012)
- **Danielle Gondard**, Université Paris VI (academic year 2011/2012)
- **David Marker**, University of Illinois at Chicago (academic year 2011/2012)
- **Karen Lange**, Wellesley College, USA (May 2012, May 2011)
- **Philipp Hieronymi**, University of Illinois at Urbana-Champaign (academic year 2011/2012)
- **Patrick Speissegger**, McMaster University, Ontario (academic year 2011/2012)
- **Katrin Tent**, University of Münster (academic year 2011/2012)
- **Jochen Koenigsman**, University of Oxford (academic year 2010/2011)
- **Antongiulio Fornasiero**, University of Münster (academic year 2010/2011)
- **Roland Speicher**, Universität des Saarlandes (academic year 2010/2011)
- **Tobias Kaiser**, University of Passau (academic year 2010/2011)
- **Arne Grenzebach**, University of Bremen (academic year 2010/2011)
- **Antongiulio Fornasiero**, University of Münster (academic year 2010/2011)

- **Heike Mildenberger**, University of Freiburg (academic year 2010/2011)
- **Pierre Simon**, Ecole Normale Supérieure de Paris (academic year 2010/2011)
- **Mirna Dzamonja**, University of East Anglia, Norwich (academic year 2010/2011)
- **Franziska Jahnke**, University of Oxford (academic year 2010/2011)
- **Julia Knight**, University of Notre Dame, Chicago (academic year 2009/2010)
- **Marcello Mamino**, Scuola Normale Superiore di Pisa (academic year 2009/2010)
- **Mikhail Kotchetov**, Memorial University, St. John's (academic year 2009/2010)
- **Marcus Tressl**, Manchester (academic year 2009/2010)
- **Olivier Le Gal**, Chambéry (academic year 2009/2010)
- **Carla Fidalgo**, Coimbra (academic year 2009/2010)

At the University of Saskatchewan (1997 - 2009)

At least 50 visitors (and more around the Valuation Theory Conference and the Colloquiumfest) from abroad visited our Algebra and Logic Research Unit in that period, visits varying from a few days to several weeks. In addition to these, the following mathematicians came for longer research visits:

- **Alexander Nenashev** visited upon invitation (2001 - 2002).
He currently a tenure track position in mathematics at York University.
- **D. Gondard** (several visits)
- **M. Otero** (March 2003)
- **N. Schwartz** (several visits)
- **Victor Vinnikov** (several months on sabbatical 2007 - 2008)

OTHER CONTRIBUTIONS RELEVANT TO MY ACADEMIC CAREER

- **Founding of Arbeitsgruppe “Mathematische Logik, Mengenlehre und Modelltheorie”**
(<https://www.mathematik.uni-konstanz.de/rag/mt/arbeitsgruppe/>), University of Konstanz
- **Founding of “Konstanz Frauen in der Mathematik: Wege in Studium und Beruf” (KWIM - Konstanz Women in Mathematics)**
(<https://www.mathematik.uni-konstanz.de/beratung-und-service/kwim/>), University of Konstanz
- **Forschungsschwerpunkt “Reelle Geometrie und Algebra”**
(<https://www.mathematik.uni-konstanz.de/rag>), University of Konstanz
- **Research Unit Algebra and Logic**
(<http://math.usask.ca/fvk/algg.htm>), University of Saskatchewan.
The Algebra and Logic Group was founded by us in 1997. It has been approved as a Research Unit in the College of Arts and Science in August 2002.

- **Student recruitment and exchange programs (University of Saskatchewan)**

Established a network of collaborators, **exchange programs** with the Universities of Greifswald, Marburg, Oldenburg, Rostock, T. U. Darmstadt, further contacts to the groups in Passau, Leipzig, Münster, Dortmund (Germany). **Collaboration and joint proposal** with the Algebra Group of Paris 6 (Prof. D. Gondard), and strong contacts to the Logic Group in Paris 7.

- Invited to participate in the podium of the “**Canada–German Research Association Alumni Day**” at the Canadian Embassy in Berlin (May 13, 2005)

RESEARCH CONTRIBUTIONS

EDITORIAL

- [1] Mathematisches Forschungsinstitut Oberwolfach, Workshop Report No. 14/2023
Real Algebraic Geometry with a View toward Koopman Operator Methods,
Eds. Henrion, D., Toulouse – Kuhlmann, S., Konstanz – Mezic, I., Santa Barbara – Vinnikov, V. Be'er Sheva; March 12 - 17 2023, Reporter: Sarah-Tanja Hess, Konstanz.
DOI: 10.14760/OWR-2023-14
- [2] Association for Symbolic Logic
Member of the Editorial Board for the *BSL*
(January 1, 2023 - December 31, 2025)
- [3] Mathematisches Forschungsinstitut Oberwolfach, Report No. 12/2020
Real Algebraic Geometry with a View Toward Hyperbolic Programming and Free Probability,
Eds. Henrion, D., Toulouse – Speicher, R., Saarbrücken – Kuhlmann, S., Konstanz – Vinnikov, V., Beer-Sheva; March 1-7 2020, Reporter: Patrick Michalski, Konstanz.
DOI: 10.4171/OWR/2020/12
- [4] Mathematisches Forschungsinstitut Oberwolfach, Report No. 14/2017
Real Algebraic Geometry with a View Toward Moment Problems and Optimization,
Eds. Henrion, D., Toulouse – Infusino, M., Konstanz – Kuhlmann, S., Konstanz – Vinnikov, V., Beer-Sheva; March 5-11 2017, Reporter: Dr. Charu Goel, Konstanz.
- [5] Mathematisches Forschungsinstitut Oberwolfach, Report No. 60/2016
Surreal Numbers, Surreal Analysis, Hahn Fields and Derivations,
Eds. Berarducci, A., Pisa – Ehrlich, P., Athens – Kuhlmann, S., Konstanz;
December 18-23 2016, 2. Reporter: Lorenzo Galeotti, Hamburg
DOI: 10.4171/OWR/2016/60
- [6] Mathematisches Forschungsinstitut Oberwolfach, Report No. 17/2014
Real Algebraic Geometry With A View Toward Systems Control and Free Positivity,
Eds. Henrion, D., Toulouse – Kuhlmann, S., Konstanz – Vinnikov, V., Beer-Sheva;
April 6-12 2014, Reporter: Dr. Rainer Sinn, Konstanz
DOI: 10.4171/OWR/2014/17
- [7] Kuhlmann, F.-V. – Kuhlmann, S. – Marshall M. (Editors):
Valuation Theory and its Applications, Volume I and II
The Fields Institute Communications Series, 32 and 33, AMS 2002 and 2003

BOOK

- [8] Kuhlmann, S.:
Ordered Exponential Fields
The Fields Institute Monograph Series, Vol. **12**, AMS Publications, 164 pages (January 2000).
See Review in CMS Notes vol. 33 No. 7, November 2001

PREPRINTS

- [9] Krapp, L. S., Kuhlmann, S., Vogel, L.:
Definable henselian valuations on dp-minimal real fields, (2024)
arXiv:2410.10344
- [10] Bagayoko, V., Krapp, L. S., Kuhlmann, S., Panazzolo, D., Serra, M.:
Automorphisms and derivations on algebras endowed with formal infinite sums, (2024)
arXiv:2403.05827
- [11] Goel, C., Hess, S., Kuhlmann, S.:
A Refinement of Hilbert's 1888 Theorem: Separating Cones along the Veronese Variety, (2024)
arXiv:2401.03813
- [12] Henrion, D., Infusino, M., Kuhlmann, S., Vinnikov, V.:
Infinite-dimensional moment-SOS hierarchy for nonlinear partial differential equations, (2023)
arXiv:2305.18768
- [13] Dressler, M., Kuhlmann, S., Schick, M.:
Geometrical Study of the Cone of Sums of Squares plus Sums of Nonnegative Circuits, (2023)
arXiv:2305.14848
- [14] Kuhlmann, S., Krapp, L. S.:
Ordered transexponential fields, (2023)
arXiv:2305.04607
- [15] Kuhlmann, S., Serra, M.:
Automorphisms of valued Hahn groups, (2023)
arXiv.2302.06290
- [16] Krapp, L. S., Kuhlmann, S., Serra, M.:
Generalised power series determined by linear recurrence relations, submitted, (2022)
arXiv.2206.04126
- [17] Kotchetov, M. – Kuhlmann, S.:
Orthogonal groups over valued fields, (2011)
- [18] Kuhlmann, S.:
Differential Fields of kappa-bounded Power Series, (2005)

REFEREED PUBLISHED ARTICLES

- [19] Debus, S., Goel, C., Kuhlmann, S., Riener, C.:
On nonnegative invariant quartics in type A,
Journal of Symbolic Computation, 128 (2025)
DOI: 10.1016/j.jsc.2024.102393
- [20] Kuhlmann, S., Goel, C., Hess, S.:
Intermediate cones between the cones of positive semidefinite forms and sums of squares,
Advances in Geometry, 24(3), 357-367 (2024)
10.1515/advgeom-2024-0014
- [21] Infusino, M., Kuhlmann, S., Kuna, P., Michalski, P.:
Moment problem for algebras generated by a nuclear space,
Advances in Mathematics, 448 (2024)
DOI: 10.1016/j.aim.2024.109677
- [22] Dittmann, P. - Jahnke, F. - Krapp, L. S. - Kuhlmann, S.:
Definable valuations on ordered fields,
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- [95] *Positivity, sums of squares, and the moment problem*
IWOTA 2012, Sydney, Australia (July 16 - 20, 2012)
- [96] *The Moment Problem for Continuous Linear Functionals*
Session on Algebraic Geometry, Moments and Optimization 2011
SIAM Conference on Applied Algebraic Geometry, North Carolina, USA (October 06 - 09, 2011)
- [97] *The General Moment Problem*
Workshop in honor of Professor Bill Helton UCSD, San Diego, USA (October 02 - 04, 2010)
- [98] *Closures of Quadratic Modules in Locally Convex Topologies*
Special Session on Operator Theory with Algebraic Connections, IWOTA 2010,
Berlin, Germany (July 12 - 16, 2010)
- [99] *Positivity in Power Series Ring*
Special Session on Real Algebraic Geometry and Applications, MTNS 2010,
Budapest, Hungary (July 05 - 09, 2010)
- [100] *Valued Differential Fields*
Mal'tsev Meeting 2010 In honour of Y.L. Ershov, Novosibirsk, Russia (May 02 - 06, 2010)
- [101] *Exponential - Logarithmic Series Fields*
Session Surreal Numbers, Joint Mathematics Meetings, San Francisco, USA, (January 13 - 16, 2010)
- [102] *Positive polynomials on projective limits of real algebraic varieties*
Special Session on Real algebraic geometry, MTNS 2008, Virginia Tech, Blacksburg, USA
(July 28 - August 01, 2008)
- [103] *Towers of complements and truncation closed embeddings of valued fields*
Association for Symbolic Logic Annual Meeting, Gainesville, Florida, USA (2007)
- [104] *Approximation of positive polynomials by sums of squares*
IMA Annual Program Year, Workshop Optimization and Control Minneapolis, USA (2007)
- [105] *Positive polynomials and Invariant Theory*
MTNS conference, Polynomial Inequalities and Applications, Kyoto, Japan (2006)
- [106] *Integer parts and complements to valuation rings*
Canadian Math. Society Summer Meeting, Calgary (2006)
- [107] *Positivity in Real Algebraic Geometry*
CARTHAPOS06, Carthage, Tunis (2006)
- [108] *Hausdorff's Lexicographic Chains*
Keldysh International Conference and Workshop, Moscow State University, Russia (2004)

- [109] *On G-Invariant Moment Problems*
Workshop on Algorithmic, Combinatorial and Applicable Real Algebraic Geometry,
MSRI Berkeley, USA (2004)
- [110] *Primes and Irreducibles in Power Series Rings, Part I and Part II*
Workshop and Conference on Logic, Algebra and Arithmetic, IPM Tehran, Iran (2003)
- [111] *Lexicographic Exponentiation of Chains*
Sixth Annual Conference in Ordered Algebraic Structures,
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- [112] *Representation of Polynomials Positive on Subsets of the Real Line,
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Meeting American Mathematical Society & Real Sociedad Matem.
Espanola, Seville, Spain (2003)
- [113] *Lexicographic Orderings*
LMS Regional Meeting, Birmingham, UK (2002)
- [114] *The Exponential-Logarithmic Power Series Fields*
CUNY Logic Workshops, New York City, USA (2001)
- [115] *Exponential Fields*
Symposium in Mathematics in honor of Professor Saharon Shelah, winner of the Bolyai and Wolf
Prizes, Ben Gurion University, Israel (2001)
- [116] *Ordered Exponential Fields*
Association for Symbolic Logic Annual Meeting, University of Pennsylvania, USA (2001)
- [117] *Lexicographic Orderings*
Canadian Math. Society Summer Meeting (2001)
- [118] *A maximality property for the Hardy field of the expansion by real powers
and restricted analytic functions*
Canadian Mathematical Society Summer Meeting (2000)
- [119] *Hardy fields of arbitrary models of polynomially bounded plus exp expansions*
American Mathematical Society Winter Meeting (1999)
- [120] *The Exponential-Logarithmic power series field*
Meeting on Model Theory of Fields Oberwolfach (1998)
- [121] *The Growth rates of exponentials in models of real exponentiation*
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- [122] *Ordered Algebraic Structures: Some current research directions*
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Ph.D. Thesis, University of Konstanz, University of Toulouse Paul Sabatier (2024 -)
- [124] Bechere, Matteo: *Tensor decompositions for sums of even powers of real polynomials*
Ph.D. Thesis, University of Konstanz (2024 -)
- [125] Baiz, Salisha: *Existenz von Bewertungsbasen für bewertete Vektorräume und Anwendungen*
B. Sc. Thesis, University of Konstanz (May 2024)
- [126] Purdy, Thomas Ryan: *Conway Normal Form and Cantor Normal Form of an ordinal*
B. Sc. Thesis, University of Saskatchewan (discontinued)
- [127] Störkle, Tim: *Schülergerechte Konzeptionierung
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Master Thesis Lehramt, University of Konstanz (January 2024)
- [128] Berger, Jannike: *Introduction to Hardy fields*
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- [129] Jankowsky, Alina: *Über die Theorie der p -adischen Zahlen - nach Kurt Hensel*
B. Sc. Thesis, University of Konstanz (May 2023)
- [130] Kattermann, David: *On the algebraic properties of group rings*
B. Sc. Thesis, University of Konstanz (March 2023)
- [131] Vogel, Lasse: *Dependent ordered structures*
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- [132] Wirth, Laura: *Archimedisch angeordnete Körper mit der NIP-Eigenschaft*
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- [133] Riedinger, Heike: *Diophantische Gleichungen und Didaktische Grundlagenerarbeitung zum Thema
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- [134] Mauch, Sophia-Elena: *Das RSA-Verfahren - Mathematische Grundlagen und fachdidaktischer Ausblick*
M. Sc. Thesis, University of Konstanz (November 2021)
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- [138] Schick, Moritz: *Optimierung von Circuit Polynomen anhand von geometrischer Programmierung*, Ph.D. Thesis, University of Konstanz (2020 -)
- [139] Nenno, Leonhard: *Reflection groups - On classification and polynomial invariants*, M. Sc. Thesis, University of Konstanz (December 2020)
- [140] Everling, Jakob: *Martins Axiom und Forcing, anhand eines analytischen Beispiels*, B. Sc. Thesis, University of Konstanz (December 2020)
- [141] Link, Moritz: *Transferability Results for Topological Properties of Ordered Groups and Fields*, M. Sc. Thesis, University of Konstanz (December 2020)
- [142] Hess, Sarah-Tanja: *Beleuchtung der Beziehung zwischen Horn's Problem und Lax Conjecture*, M. Sc. Thesis, University of Konstanz (September 2020)
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- [148] Janocha, Daria Lucia: *Transzendenz in der Algebra*, Zulassungsarbeit für Lehramt, University of Konstanz (2019)
- [149] Gühr, Ruben: *Eine Abhandlung über die Galoistheorie - Charakterisierung von Galoiserweiterungen und konstruierbare Zahlen*, Bachelor Thesis and Zulassungsarbeit für Lehramt, University of Konstanz (2018)
- [150] Hess, Sarah-Tanja: *Elliptic curves and their application in key exchange cryptography*, B. Sc. Thesis, University of Konstanz (2018)
KOPS: urn:nbn:de:bsz:352-2-gulfjde9kdan6
- [151] Michalski, Patrick: *Infinite dimensional moment problems*, Ph.D. Thesis, University of Konstanz (2018 - 2021)
KOPS: urn:nbn:de:bsz:352-2-10h23kyk56is55

- [152] Serra, Michele: *Automorphism Groups of Hahn Groups and Hahn Fields*,
Ph.D. Thesis, University of Konstanz (2017 - 2021)
KOPS: urn:nbn:de:bsz:352-2-19yqyhucnbtlw9
- [153] Müller, Simon: *Quasi-Ordered Rings: a uniform Study of Orderings and Valuations*,
Ph.D. Thesis, University of Konstanz (2020)
KOPS: urn:nbn:de:bsz:352-2-22s99ripn6un3
- [154] Krapp, Lothar Sebastian: *On the structure of non-archimedean o-minimal exponential fields*,
Ph.D. Thesis, University of Konstanz (2019)
KOPS: urn:nbn:de:bsz:352-2-166bghaubh8tf9
- [155] Lehéricy, Gabriel: *The differential valuative rank of a differential valued field*,
Ph.D. Thesis, University of Konstanz (2018)
- [156] Steinmeyer, Pia: *Über die Prolösbarkeit der absoluten Galoisgruppe von Q_p* ,
B. Sc. Thesis, University of Konstanz (2018)
- [157] Schick, Moritz: *Surreale Zahlen*,
B. Sc. Thesis, University of Konstanz (2018)
KOPS: urn:nbn:de:bsz:352-2-2w9l1j8hhgzp3
- [158] Michalski, Patrick: *On Schmüdgen's fiber theorems for moment problems*,
M. Sc. Thesis, University of Konstanz (2017)
- [159] Jindadu, Isaac Ayoola: *A study of the Hamburger moment problem on the real line*,
M. Sc. Thesis, University of Konstanz (2017)
- [160] Gütlein, Sophie Linnea: *The ordered field of real numbers with exponentiation:
model completeness, decidability and Schanuel's conjecture*,
M. Sc. Thesis, University of Konstanz (2017)
- [161] Walder, Natalia: *Exponentiation in non-archimedean ordered fields*,
M. Sc. Thesis, University of Konstanz (2017)
- [162] Yao, Siqi: *Positive polynomials and sum of squares in formal power series rings*,
M. Sc. Thesis, University of Konstanz (2016)
- [163] Loeffler, Fabian: *Die Kryptologie - eine Anwendung der Zahlentheorie und ihre Einbindung
in den Mathematikunterricht*,
Zulassungsarbeit für Lehramt, University of Konstanz (2016)
- [164] Kiefer, Renate: *Konstruktionen mit Zirkel und Lineal - Eine Anwendung der Galois-Theorie
mit Beispielen für den gymnasialen Schulunterricht*,
Zulassungsarbeit für Lehramt, University of Konstanz (2016)
- [165] Ulber, Peter *Ordnungstypen von Modellen schwacher Arithmetiken*,
Diplom-Arbeit, University of Konstanz (2015)

- [166] Dupont, Katharina: *Definable valuations on NIP fields*,
Ph.D. Thesis, University of Konstanz (2015)
KOPS: urn:nbn:de:bsz:352-0-301228
- [167] Goel, Charu: *Extension of Hilbert's 1888 Theorem to Even Symmetric Forms*,
Ph.D. Thesis, University of Konstanz (2014)
KOPS: urn:nbn:de:bsz:352-0-263940
- [168] Gengelbach, Arve: *Über die Charakterisierung irreduzibler Potenzreihen anhand ihres ordinalen Ordnungstyps*,
Diplom-Arbeit, University of Konstanz (2014)
- [169] Michalski, Patrick: *Determinantal Representations of Homogeneous Polynomials in Few Variables and Those Expressible as a Product of Linear Polynomials*,
B. Sc. Thesis, University of Konstanz (2014)
- [170] Ghasemi, Mehdi: *Polynomial Optimization and the Moment Problem*,
Ph.D. Thesis, University of Saskatchewan (2012)
- [171] Harde, Johanna: *Über die Wertegruppe einer differentiellen Bewertung*,
M. Sc. Thesis, University of Konstanz (2011)
- [172] Vogt, Lisa: *\aleph_1 freie Gruppen*,
B. Sc. Thesis, University of Konstanz (2011)
- [173] Parsch, Fabian: *Geometrie und Topologie in o-minimalen Strukturen*,
B. Sc. Thesis, University of Konstanz (2010)
- [174] Schachtner, Markus: *Dichte lineare Anordnungen*,
B. Sc. Thesis, University of Konstanz (2010)
- [175] Rapp, Martin: *Complex Analysis in o-minimal structures: Fundamental Theory and Applications*,
B. Sc. Thesis, University of Konstanz (2010)
- [176] Haias, Manuela: *On the value group of exponential and differential ordered fields*,
M. Sc. Thesis, University of Saskatchewan (2007)
- [177] Fan, Wei: *Non-negative polynomials on compact semi-algebraic sets in one variable case*,
M. Sc. Thesis, University of Saskatchewan (2006)
- [178] Green, Trevor: *Properties of chain products and Ehrenfeucht–Fraïssé Games on Chains*,
M. Sc. Thesis, University of Saskatchewan (2002)
- [179] Chun, Hyunku: *The orthogonal group of an elliptic space*,
M. Sc. Thesis, University of Saskatchewan (2001)
- [180] Zekavat, Mahdi: *Orderings, cuts and formal power series*,
Ph.D. Thesis, University of Saskatchewan (2000)

NSERC undergraduate papers, University of Saskatchewan

- [181] Hancock, M.: *Algorithms in Invariant Theory* (2005)
- [182] Lee, J.: *Exponentiation on Algebraic Puiseux Series Fields* (2003)
- [183] Danchilla, B.: *Current Status of some famous open conjectures in Number Theory* (2003)
- [184] Lee, J.: *Elliptic Curves and Cryptography* (2002)
- [185] Chilliack, C.: *The Orthogonal Group of a Euclidean Space* (2000)
- [186] Mader, A.: *Sturm's Algorithm* Computer Program (1999)
- [187] Arbuthnott, C.: *A proof of Rosenlicht's Lemma* (1999)

SELECTED INVITED TALKS (since 2003 only)

Academic Year 2023 – 2024

- **Resolution of singularities, valuation theory and related topics**
A celebration of the 63rd birthday of Mark Spivakovsky
UNAM Morelia, Mexico (August 05 - 09, 2024)
- **Polynomial Optimization for Nonlinear Dynamics: Theory, Algorithms, and Applications**
Mathematisches Forschungsinstitut Oberwolfach
Oberwolfach, Germany (July 28 - August 02, 2024)
- **Séminaire de Théorie des Nombres de Nancy-Metz**
Institut Élie Cartan, Nancy, France (May 30, 2024)
- **Séminaire Général de Logique**
Institut de Mathématiques de Jussieu-Paris Rive Gauche,
Paris, France (May 27, 2024)
- **The Exponential Logarithmic Power Series Fields**
Séminaire de Mathématiques et Colloquium
Université Haute-Alsace, Mulhouse, France (March 21, 2024)
- **Young Women in Model Theory and Applications**
Hausdorff Center for Mathematics
University of Bonn, Germany (March 11 - 14, 2024)
- **Positive Polynomials and Moment Problems**
Frankfurter Seminar - Kolloquium des Instituts für Mathematik
Goethe-University Frankfurt, Germany (December 12, 2023)
- **Polynomial Optimization**, POP23 - Future Trends in Polynomial OPtimization
Toulouse, France (November 13 - 17, 2023)

- **Online Logic Seminar**

Southern Illinois University, USA (October 26, 2023)

Academic Year 2022 – 2023

- **Moment Problems and Applications,**

IWOTA 2023 - 34th International Workshop on Operator Theory and its Applications
Helsinki, Finland (July 31 - August 04, 2023)

- **Moment problem for algebras generated by a nuclear space,**

Banff International Research Station (BIRS) for Mathematical Innovation and Discovery
Banff, Canada (May 23, 2023)

- **Generalised power series determined by linear recurrence relations,**

Séminaire structures algébriques ordonnées

Institut de Mathématique de Jussieu-Paris-Rive-Gauche, Paris, France (March 28, 2023)

Academic Year 2021 – 2022

- **A Tale of Two Cones: PSD vs SOS in equivariant situations,**

Invited Session " Moment Problems, Convex Algebraic Geometry, and Semidefinite Relaxations"
MTNS 2022 - 25th International Symposium on Mathematical Theory of Networks and Systems
Bayreuth, Germany (September 15, 2022)

- **Truncated and Full Moment Problems and Applications,**

IWOTA 2022 - International Workshop on Operator Theory and its Applications
Krakow, Poland (September 09, 2022)

- **The generalised truncated Moment Problem,**

(Polynomial Optimization, Efficiency through Moments and Algebra) Final Workshop
Paris, France (September 05, 2022)

- **Trends in ring theory and related topics,** European Women in Mathematics General Meeting
Aalto University, Finland (August 2022)

- **Distinguished Subfields of Hahn Fields,** Séminaire structures algébriques ordonnées
Institut de Mathématique de Jussieu-Paris-Rive-Gauche, Paris, France (March 22, 2022)

- **The Analogues of Hilbert's 1888 Theorem for Symmetric and Even Symmetric Forms,**
Newcastle Functional Analysis Seminar (November 23, 2021)

Academic Year 2020 – 2021

- **On Rayner Structures,** Séminaire structures algébriques ordonnées,

Institut de Mathématique de Jussieu-Paris-Rive-Gauche, Paris, France (March 23, 2021)

- **Strongly NIP almost real closed fields,**

Models and Sets Seminar Series, University of Leeds, UK (January 13, 2021)

- **On ordered fields dense in their real closure and definable valuations,**
Valuation Theory Seminar in MSRI Semester "Decidability, Definability and Computability in Number Theory" (December 09, 2020)
- **The Moment Problem for the Polynomial Algebra in infinitely many variables,**
Invited Lecture at the POEMA Workshop (November 26, 2020)

Academic Year 2019 – 2020

- **Projective limit techniques for Positivstellensätze,**
Lecture at the Séminaire de structures algébriques ordonnées
Institut de Mathématiques de Jussieu-Paris Rive Gauche, Paris, France (February 18, 2020)
- **From finite to infinite dimensional moment problems,**
Lecture at the Department of Mathematics, Ben Gurion University of Negev, Israel (January 07, 2020)
- **Fields of Generalized Power Series (the mysteries and obstacles around formal summability),**
Workshop: "Noncommutative Analysis, Computational Complexity, and Quantum Information" Harvard University, Center of Mathematical Sciences and Applications (October 18, 2019)

Academic Year 2018 – 2019

- **Bruce Reznick 66 fest: A mensch of Combinatorial-Algebraic Mathematics,**
University of Bern, Switzerland (July 08, 2019)
- **Geometry of Real Polynomials, Convexity and Optimization, (19w5180)**
Station for Mathematical Innovation and Discovery
The Banff Center, Banff, Canada (May 26 - 31, 2019)
- **Automorphism groups of fields of generalised series,**
Edinburgh Mathematical Society meeting University of Aberdeen, UK (May 24, 2019)
- **Ordered fields dense in their real closure and definable convex valuations,**
Séminaire de structures algébriques ordonnées
Institut des Mathématiques de Jussieu-Paris Rive Gauche, Paris, France (May 14, 2019)
- **Automorphism groups of Hahn groups and fields,**
Workshop "Dynamical systems and beyond 2019, Department of Mathematics,
University of Pisa, Italy (March 25, 2019)
- **Strongly NIP almost real closed fields,**
Séminaire théorie des modèles et groupes, Université Paris-Diderot, France (March 12, 2019)
- **On ordered fields dense in their real closure,**
Ben-Gurion University of the Negev, Israel (February 17, 2019)
- **British postgraduate model theory conference,**
University of Manchester, UK (January 16 - 18, 2019)
- **Real closed fields and Peano arithmetic,**
Institut de Mathématiques de Toulouse, France (October 07, 2018)
- **Positive polynomials and moment problems,**
Multidisciplinary Optimization Seminar in Toulouse, France (October 01, 2018)

Academic Year 2017 – 2018

- **Positive polynomials and moments problem,**
Institut de Mathématiques de Bordeaux IMB, France (September 28, 2018)
- **The moment problem for infinite dimensional spaces,**
Mini-Symposium “Real algebraic geometry in action” during 18th General Meeting of the European Women in Mathematics, Graz, Austria (September 07, 2018)
- **From Gödel’s Incompleteness Theorem to Real Algebra,**
Mini-Symposium “Mathematical Logic” during 18th General Meeting of the European Women in Mathematics, Graz, Austria (September 03, 2018)
- **The Moment problem for infinite dimensional spaces,**
International Workshop on Operator Theory and Applications
East China Normal University, Shanghai (July 23 - 27, 2018)
- **The Moment problem for the real polynomial algebra in infinitely many variables,**
The 23rd International Symposium on Mathematical Theory of Networks and Systems,
The Hong Kong University of Science and Technology, Hong Kong (July 16 - 20, 2018)
- **From Hilbert’s 17th Problem to Infinite Dimensional Moment Problems,**
North British Functional Analysis Seminar (NBFAS)
Newcastle-upon-Tyne, Northern Ireland (May 29, 2018)
- **Real closed fields and models of Peano arithmetic,**
Seminarios de Álgebra Commutativa-Geometría Algebraica y Aritmética UAM-ICMAT,
Instituto de Ciencias Matemáticas, Madrid, Spain (May 18, 2018)
- **Set Theory, Model Theory and Applications (In memory of Mati Rubin),**
Research Workshop of the Israel Science Foundation,
Eilat Campus of Ben-Gurion University of the Negev, Israel (April 23, 2018)
- **Differential valued fields of kappa-bounded generalized power series,**
Institut Henri Poincaré, Paris, France (February 28, 2018)
- **Groupes abéliens divisibles ordonnés ayant la propriété de relèvement,**
Institut des Mathématiques de Jussieu-Paris Rive Gauche, France (October 10, 2017)

Academic Year 2016 – 2017

- **k-bounded exponential groups and exponential-logarithmic power series fields without log-atomic elements,** XXVI incontro dell’Associazione Italiana di Logica e sue Applicazioni, Padova, Italy (September 27, 2017)
- **Kappa-bounded exponential groups and exponential-logarithmic power series fields without log-atomic elements,** Institut des Mathématiques de Jussieu-Paris Rive Gauche, France (March 14, 2017)
- **The Baer-Krull Theorem for Quasi-ordered fields,**
Seminar in Logic, Set Theory and Topology, Ben Gurion University, Israel (January 03, 2017)

Academic Year 2015 – 2016

- **Moment problem for symmetric algebras of locally convex spaces,**
22nd International Symposium on Mathematical Theory of Networks and Systems
University of Minnesota, Minneapolis, USA (July 14, 2016)
- **Quasi-Orders: a uniform approach to orders and valuations,**
DMV-GAMM Meeting 2016, Braunschweig, Germany (March 09, 2016)
- **Real Closed Fields and Models of Peano Arithmetic,**
Logic Seminar at Mathematical Institute, University of Oxford, UK (March 03, 2016)
- **New Pathways between Group Theory and Model Theory,** Conference in memory
of Rüdiger Göbel (1940 - 2014), Mülheim an der Ruhr, Germany (February 02, 2016)
- **Exponential-logarithmic power series fields and the surreal numbers,**
AMS.MMA Joint Mathematics Meetings, Seattle, USA (January 08, 2016)
- **Quasi-order- minimality: a uniform approach to o-minimality, C-minimality, p-minimality
and variants thereof,** Seminar in Logic, Set Theory and Topology, Ben Gurion University, Israel
(December 29, 2015)
- **Real Closed Fields and Models of Peano Arithmetic,**
Conference: Ordered Algebraic Structures and Related Topics
Centre International de Rencontres Mathématiques, Marseille, France (October 23, 2015)

Academic Year 2014 – 2015

- **Quasi-Orderings: a uniform approach to orderings and valuations,**
First Joint International Meeting of the Israel Mathematical Union and the Mexican Mathematical
Society - Algebraic Geometry Session, Instituto Tecnológico de Oaxaca, Mexico (September 08, 2015)
- **Moment problem in infinitely many variables,** IWOTA 2015 - International Workshop
on Operator Theory and Applications, Tbilisi, Georgia (July 06, 2015)
- **Application of the Archimedean Positivstellensatz to locally multiplicatively
convex real algebras,** EWM German Chapter, Schloss Rauischholzhausen, Germany (May 02, 2015)
- **On the value group of a model of Peano arithmetic,**
BGU Logic and Set Theoretic Topology Seminar, Ben Gurion University, Israel (December 31, 2014)

Academic Year 2013 – 2014

- **Extension of Hilbert's 1888 theorem to Even Symmetric Forms,**
Math & Stats Colloquium, University of Saskatchewan, Canada (September 12, 2014)
- **Program on Inverse Moment Problems,** Singapore (January 13, 2014)
- **IWOTA 2013,** Indian Institute of Science, Bangalore, India (December 19, 2013)
- **Seminaire Général de Logique,**
Université de Paris 7, UFR de Mathématiques, France (November 25, 2013)
- **Model Theory of Fields,** University Mons, Belgium (November 18, 2013)

- **Midwest Model Theory Day**, University of Illinois, Chicago, USA (October 22, 2013)
- **Algebra and Logic Seminar**, University of Saskatchewan, Canada (October 09, 2013)
- **Colloquium**, University of Saskatchewan, Canada (October 04, 2013)

Academic Year 2012 – 2013

- **Colloquium and Séminaire de Géométrie**, Institut de Mathématiques de Bordeaux 1, France (May 30 - 31, 2013)
- **Logic Seminar**, HUJ (January 02, 2013)
- **Séminaire sur les structures algébriques ordonnées**, Paris 7, France (November 2012)
- **GTM - Géometrie et Théorie des Modèles**, Institut Henri Poincaré, Paris, France (November 2012)
- **Logic Seminar**, University of Manchester, UK (October 2012)
- **Logic Seminar**, Seconda Università di Napoli, Caserta, Italy (October 2012)

Academic Year 2011 – 2012

- **Colloquium Logicum 2012**, Paderborn, Germany (September 13 - 15, 2012)
- **IWOTA 2012**, Sydney, Australia (July 16 - 20, 2012)
- **Séminaire Géométrie**, Institut de Mathématiques de Bordeaux, France (May 2012)
- **Real Algebraic Geometry Workshop 2012**, University of Magdeburg, Germany (February 2012)
- **Logic and Set Theory Seminar**, Ben Gurion University, Israel (December 2011)
- **Workshop GeoLMI**, Rennes, France (November 2011)
- **Algebraic Geometry, Moments and Optimization 2011**, SIAM Conference on Applied Algebraic Geometry, North Carolina, USA (October 2011)

Academic Year 2010 – 2011

- **Oberseminar Logik**, University of Freiburg (May 2011)
- **Oberseminar Modelltheorie, Geometrie und Gruppentheorie**, University of Münster, Münster, Germany (April 2011)
- **Logic Seminar**, Seconda Università di Napoli, Caserta, Italy (April 2011)
- **Algebra and Logic Seminar**, University of Saskatchewan, Canada (March 2011)
- **Conference Real algebra, Geometry and Convexity**, University of Leipzig, Germany (February 2011)
- **Logic Seminar**, CMAF, Universidade de Lisboa, Portugal (February 2011)
- **Logic and Set Theoretic Topology Seminar**, Ben Gurion University, Israel (January 2011)
- **Séminaire sur les structures algébriques ordonnées**, Paris 7, France (January 2011)
- **Séminaire général de Logique**, Paris 7, France (January 2011)
- **Séminaire Algèbre et Géométrie**, Unviersité de Versailles - Saint-Quentin, France (January 2011)

- **Oberseminar Mathematische Logik**, University of Bonn, Germany (December 2010)
- **Logic Seminar**, University of Oxford, UK (December 2010)
- **Workshop in honor of Professor Bill Helton**, UCSD, San Diego, USA (October 2010)

Academic Year 2009 – 2010

- **Algebra and Logic Seminar**, University of Saskatchewan, Canada (September 2010)
- **Special Session Real Algebraic Geometry & Applications**,
MTNS 2010, Budapest, Hungary (July 2010)
- **Special Session on Operator Theory with Algebraic Connections**,
IWOTA 2010, Berlin, Germany (July 2010)
- **Mal'tsev Meeting 2010**, In honour of Y.L. Ershov, Novosibirsk, Russia (May 2010)
- **Session Surreal Numbers**, Joint Mathematics Meetings, San Francisco, USA (January 2010)
- **Algebraic Geometry and Number Theory**, Ben Gurion University, Israel (January 2010)
- **Logic Seminar**, Hebrew University, Jerusalem, Israel (January 2010)
- **Seminar**, Weizmann Institut, Rehovot, Israel (December 2009)

Academic Year 2008 – 2009

- **Logic Seminar**, University of Illinois at Chicago, USA (March 2009)
- **Special Session on Concrete Aspects of Real Positive Polynomials**,
AMS Central Meeting 09, Urbana, Illinois, USA (March 2009)

Academic Year 2007 – 2008

- **Special Session on Real Algebraic Geometry, Applications and Related Topics**,
MTNS 08, Blacksburg, Virginia, USA (July 2008)
- **Special Session on Model Theory and Applications to Geometry**,
CMS-SMF joint Meeting, University of Montreal, Canada (June 2008)
- **Special Session on Real Algebra and its interactions with Functional Analysis**,
LAW'08, Kranjska Gora, Slovenia (May 2008)
- **Seminaire Structures Algébriques Ordonnées**, invited speaker, Paris 7, France (May 2008)
- **Logic Seminar**, Notre Dame University, South Bend, USA (November 2007)
- **Logic Seminar**, Three talks, Université de Mons-Hainaut, Belgium (November 2007)
- **Seminaire Général de Logique**, invited speaker, Paris 7, France (November 2007)

Academic Year 2006 – 2007

- **Journées en l'Honneur de Max Dickmann**, invited speaker, Université Paris 7, France (June 2007)

- **Seminaire Equations Différentielles**, invited speaker, Université de Bourgogne, France (June 2007)
- **Special Session on Contemporary Model Theory and its Applications**, invited speaker, CMS Summer Meeting University of Manitoba, Winnipeg, Canada (June 2007)
- **Prairies Mini-Meeting**, invited speaker, University of Regina, Canada (May 2007)
- **Math Colloquium**, invited speaker, Ben Gurion Univ, Israel (April 2007)
- **Set Theory Seminar**, invited speaker, Ben Gurion University, Israel (April 2007)
- **Algebraic Geometry Seminar**, invited speaker, Ben Gurion University, Israel (April 2007)
- **Set Theory Seminar**, invited speaker, Hebrew University, Israel (April 2007)
- **Algebra Seminar, two talks**, invited speaker, University of Haifa, Israel (April 2007)
- **Seminar Reelle Algebraische Geometrie**, invited speaker, University Regensburg, Germany (March 2007)
- **Seminaire Général de Logique**, Paris 7, France (March 2007)
- **Seminaire Structures Algébriques Ordonnées**, Paris 7, France, (March 2007)
- **Workshop on Real Algebraic Geometry**, invited participant, Oberwolfach, Germany (March 2007)
- **Association for Symbolic Logic Annual Meeting**, plenary speaker, University of Florida, Gainesville, USA (March 2007)
- **Workshop on Optimization and Control**, plenary speaker, IMA, University of Minnesota, Minneapolis, USA (January 2007)
- **Workshop “Positive Polynomials and Optimization”**, organizer and participant, BIRS, Banff, Canada (October 2006)

Academic Year 2005 – 2006

- **Colloque o-minimalité**, participant, Equipe de Logique, CNRS Paris 7, France (September 2006)
- **Mini-Symposium on Polynomial Inequalities and Applications**, invited participant, Organizers: Bill Helton, Pablo Parrilo, Mihai Putinar; Kyoto, Japan (July 2006)
- **CARTHAPOS06 A Workshop on Positivity**, invited participant, Tunis, Tunisia (June 2006)
- **Special Session on Model Theory**, invited speaker, Annual Meeting of the Canadian Mathematical Society, Calgary, Canada (June 2006)
- **Workshop on Extreme Forms of real algebraic varieties**, invited participant, AIM, Organizers: Ilia Itenberg, Grigory Mikhalkin, Oleg Viro; Palo Alto, USA (April 2006)
- **Model Theory Seminar: Hamilton Differentiel fields of exponential-logarithmic power series**, McMaster, Canada (February 2006)
- **Seminaire général de Logique: Corps Differentiels de series exponentielles-logarithmiques**, Université Paris 7, Paris, France (November 2005)
- **Seminaire Algèbre et Géometrie: Polynômes positifs et problème des moments and Corps de Transséries**, (Three talks) Université de Versailles - Saint-Quentin, Versailles, France (November - December 2005)

Academic Year 2004–2005

- **Model Theory Applications to Algebra and Analysis: Truncation Integer Parts of Valued Fields**, Newton Institute, Cambridge , UK (May 2005)
- **Conference on Positive Polynomials: The Invariant Moment Problem**, CIRM Luminy, France (March 2005)

Academic Year 2003–2004

- **Hausdorff's Lexicographic Chains**, Keldysh International Conference and Workshop, Moscow State University, Russia (August 2004)
- **Colloquium: Hilbert's 17th problem & moment problem**, Zagreb University, Croatia (June 2004)
- **Colloquium: Le Probleme des Moments**, Université d'Angers, France (June 2004)
- **Colloquium: Positivstellensatz & Moment Problem**, University of Bonn, Germany (May 2004)
- **Colloquium Logikum: κ -bounded Exponential–Logarithmic power series fields**, University of Bonn, Germany (May 2004)
- **On G-Invariant Moment Problems**,
Workshop on Algorithmic, Combinatorial and Applicable Real Algebraic Geometry,
MSRI, Berkeley, USA (April 2004)
- **Primes and Irreducibles in Ordered Group and Power Series Rings**,
Seminaire Algèbre et Géometrie, (3 Talks)
Université de Versailles - Saint-Quentin, France (March, May, June 2004)
- **Algebra Seminar: Exponential Integer Parts of Exponential Fields**,
University of Pisa, Italy (March 2004)
- **Positivstellensatz et le Problème des Moments**,
Séminaire de Structures Algébriques Ordonnées, Université Paris 7, France (March 2004)
- **Corps de series Exponentielles Logarithmiques κ -bornées**,
Séminaire général de Logique, Université Paris 7, France (February 2004)
- **Primes and Irreducibles in Power Series Rings**,
Seminar Reelle Algebraische Geometrie, University of Regensburg, Germany (February 2004)
- **Colloquium: A talk on Real Closed Fields**, Cairo University, Egypt (January 2004)
- **Primes and Irreducibles in Exponential Integer Parts of Ordered Exponential Fields**,
Algebra Seminar, Universidad Autonoma, Madrid, Spain (December 2003)
- **Séminaire général de Logique: Lexicographic Exponentiation of Chains**,
Université Paris 7, France (November 2003)
- **Workshop and Conference on Logic, Algebra and Arithmetic**,
(Two talks) Primes and Irreducibles in Power Series Rings, IPM Tehran, Iran (October 2003)
- **Colloquium: A talk on Model Theory**, Shiraz University, Iran (October 2003)