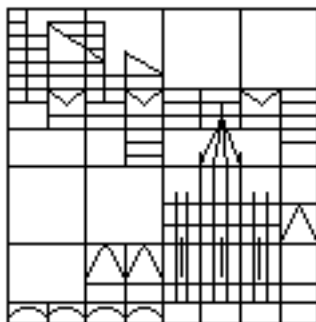


Universität Konstanz

Fachbereich Mathematik und Statistik
Prof. Dr. Salma Kuhlmann
Konstanz, December 11 2018



Universitätsstraße 10

Telefon +49 (0) 7531.88 27 87

Fax +49 (0) 7531.88 27 70

E-Mail salma.kuhlmann@uni-konstanz.de

CURRICULUM VITAE

EDUCATION

- **Mathematische Fakultät, Universität Heidelberg, Germany (1990 – 1996)**
Habilitation and Venia Legendi in Mathematics (June 1999)
Habilitation Thesis: Ordered Exponential Fields.
Habilitation talk: *On Shelling E_8 -Quasicrystals* (after Moody and Weiss) followed by a Colloquium talk: *Quasicrystals and Icosians* (after Moody and Patera)
- **Université Paris 7, France**
Doctorat de Mathématiques (July 1991)
Thesis: Quelques Propriétés des Espaces Vectoriels Valués en Théorie des Modèles
Advisor: Professor Daniel Lascar
- **Diplome d'Etudes Approfondies en Mathématiques (June 1984)**
Advisor: Professor Daniel Lascar
- **McGill University, Montreal, Canada**
Bachelor of Sciences: First Class Honours in Mathematics (June 1981)

POSITIONS

- **W3 Professur** (endowment: 2 positions) Universität Konstanz, Germany (appointed July 2009)
- **Adjunct Professor** University of Saskatchewan, Canada (2009 - 2019)
- **Professor** (with tenure), University of Saskatchewan (July 2003 - July 2009)
- **Associate Professor** (with tenure), University of Saskatchewan (appointed July 1997)
- **Visiting Member** at the **Fields Institute**, Toronto (academic year 1996-97)
- **Habilitation Fellow** of the **German Research Association** (1995-97)
- **Visiting Professor** at the **Punjab University**, Chandigarh, India (1995)
- **Post-Doctoral Fellow** of the **University of Heidelberg** (1992-94)
- **Graduate Assistant**, Mathematics Institute, **University of Heidelberg** (1988-89)
- **Doctoral Fellow** of the French Government, **University of Paris 7** (1984-87)

PROJECTS

- **POEMA (Polynomial Optimization, Efficiency through Moments and Algebra)**
(mit Bernard Mouorrain (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
- **AFF-Project (Ordered Algebraic Structures)**
Ausschuss für Forschungsfragen, Universität Konstanz
- **Summer School in Tame Theory**
VW-Stiftung (18.07.2016 bis 23.07.2018)
- **Doctoral Scholarship for Sebastian Krapp**
CARL-ZEISS-STIFTUNG (01.07.2016 bis 30.06.2018)
- **Director of Project “Konstanz Women in Mathematics: paths in studies and career” (KWIM)**
Universität Konstanz (2013 - present)
- **Long Term Scholarship for Katharina Dupont**
MINERVA (September 2013 - March 2014)
- **Scholarship for Eli Shamovich as PhD-Student at the Universität Konstanz**
EDEN (6 Months, 2013/2014)
- **Scholarship for Gil Keren as Master-Student at the Universität 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 (March - April 2013)
- **Scholarship for Mehdi Ghasemi**
Ausschuss für Forschungsfragen (AFF) (50% TV-L 13, October - December 2012)
- **Scholarship for Isabella Fascitiello as student assistant**
Ausschuss für Forschungsfragen (AFF) (November 2012)
- **“Internationale Forscherinnen in Konstanz” for Prof. Karen Lange**
Universität Konstanz (Förderlinie 1, Gleichstellungsrat) (27.5.-11.6.2012)
- **Research scholarship at the Universität Konstanz for Prof. Dr. Paola D’Aquino**
German Academic Exchange Service (DAAD) (1 Month, 2012)
- **“Brückenstipendium für Nachwuchswissenschaftlerinnen” for Charu Goel**
Universität Konstanz (Förderlinie 3, Gleichstellungsrat) (1.11.2010 - 31.7.2011)

- **Scholarship for Noa Lavi as student assistant**
Ausschuss für Forschungsfragen (AFF) (October - December 2010)
- **“Internationale Forscherinnen in Konstanz” for Prof. Julia Knight**
Universität Konstanz (Förderlinie 1, Gleichstellungsrat) (15.-20.7.2010)
- **“Brückenstipendium für Nachwuchswissenschaftlerinnen” for Margaret Thomas**
Universität Konstanz (Förderlinie 3, Gleichstellungsrat) (1.1.2010 - 30.6.2010)

HONOURS and GRANTS

- **Forschungsinitiative “Real Algebraic Geometry and Emerging Applications”**
Universität Konstanz via German Research Association (DFG) (2010-2014)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
Discovery Grant 2005-2010 (18,000 \$/year)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
individual research grant 2001–2005 (17,000 \$/year)
- **Natural Sciences and Engineering Research Council of Canada (NSERC)**
individual research grant 1998–2001 (16,000 \$/year)
- **President’s NSERC fund** from the **University of Saskatchewan** (1997-1998)
- **Habilitation grant** from the **German Research Association** (DFG) (1995-97)
- **Research grant** from the **University of Heidelberg** (1992-94)
- **Ph.D. Fellowship** from the **French Government** (1984-87)
- **Graduate Grant** from Logic Research Fund of Professor Makkai, **McGill University**.
- **Scholarship** from **Government of Quebec** (1981-82)
- **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 8th 1958

Gender: Female

Citizenship: Egyptian and Canadian. Niederlassungserlaubnis in Deutschland.

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

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Academic Assistants, Universität Konstanz (since 2009)

- **Maria Infusino**, since October 2014
I am currently supervising the Habilitation of Dr. Maria Infusino (2018)
- **Cédric Milliet**, September 2013 - September 2014
- **Quentin Brouette**, June - July 2013
- **Isabella Fascitiello**, November 2012
- **Mehdi Ghasemi**, October - December 2012
- **Merlin Carl**, since 2011
I supervised the Habilitation of Dr. Merlin Carl (2017)
- **Lorna Gregory**, 2011 - 2013
- **Andrew Dolphin**, August 2011
- **Itay Kaplan**, July 2010 - July 2011.
Currently Lecturer at the Hebrew University, Jerusalem
- **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
- Recruited 2 Post-Doctoral Fellows:
Dr. M. Thomas (2010-2016) and **Dr. P. Eleftheriou** (2015-2020) for the Zukunftskolleg, for whom I am the mentor and the local host. Both were successful in acquiring third party funding (DFG)

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

- **Katarzyna Osiak** visiting post-doctoral fellow August - October 2008.
Currently assistant professor, Institute of Mathematics, University of Silesia, Poland.
- **Mickaël Matusinski** visiting post-doctoral fellow March - September 2008
- **Andreas Fischer** visiting post-doctoral fellow April 2006 - August 2008.
Currently Gymnasium teacher, Germany.
- **Antongiulio Fornasiero** visiting post-doctoral fellow January-March 2005
Currently Assistant Professor, University of Florence
- **Ulrich Hermisson** 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 al Akhawayn University in Morocco
- **Matthias Aschenbrenner** visiting post-doctoral fellow March 2001.
Currently professor at University of California, Los Angeles
- **Marcus Tressl** visiting post-doctoral fellow March - May 2002
Currently lecturer, University of Manchester, UK

Graduate Students: Bachelor

- **Ruben Gühr**, Bachelor-Arbeit [101], November 2018, Universität Konstanz
- **Sarah-Tanja Hess**, Bachelor-Arbeit [102], November 2018, Universität Konstanz
- **Pia Steinmeyer**, Bachelor-Arbeit [107], April 2018, Universität Konstanz
- **Moritz Schick**, Bachelor-Arbeit [108], März 2018, Universität Konstanz
- **Patrick Michalski**, Bachelor-Arbeit [120], October 2014, Universität Konstanz
- **Lisa Vogt**, Bachelor-Arbeit [123], March 2011, Universität Konstanz
- **Fabian Parsch**, Bachelor-Arbeit [124], October 2010, Universität Konstanz
- **Markus Schachtner**, Bachelor-Arbeit [125], October 2010, Universität Konstanz
- **Martin Rapp**, Bachelor-Arbeit [126], August 2010, Universität Konstanz

Graduate Students: Master

- **Isaac Ayoolo Jinadu**, M. Sc. thesis [110], September 2017, University of Saskatchewan
- **Patrick Michalski**, M. Sc. thesis [109], 2017, Universität Konstanz
- **Sophie Linnea Gütlein**, M. Sc. thesis [111], December 2016, Universität Konstanz
- **Natalia Walder**, M. Sc. thesis [112], July 2016, Universität Konstanz
- **Siqi Yao**, M. Sc. thesis [113], February 2016, Universität Konstanz
- **Sebastian Loeffler**, Zulassungsarbeit für Lehramt [114], February 2016, Universität Konstanz
- **Renate Kiefer**, Zulassungsarbeit für Lehramt [115], February 2016, Universität Konstanz
- **Johanna Harde**, M. Sc. thesis [122], October 2011, Universität Konstanz
- **Manuela Haias**, co-supervised M. Sc. thesis [127], 2004 - 2007, University of Saskatchewan
- **Wei Fan**, co-supervised M. Sc. thesis [128], 2004 - 2006, University of Saskatchewan
- **Jonathan Lee**, 2003 - 2005, University of Saskatchewan
- **Trevor Green** M. Sc. thesis [129], 2000 - 2002, University of Saskatchewan
- **Hyunku Chun** M. Sc. thesis [130], 1999 - 2001, University of Saskatchewan

Graduate Students: Diplom

- **Peter Ulber**, Diplom-Arbeit [116], Universität Konstanz, December 2015
- **Arve Gengelbach**, Diplom-Arbeit [119], Universität Konstanz, October 2014

Graduate Students: Doctor

- **Patrick Michalski**, co-supervising Ph.D. thesis since January 2018, Universität Konstanz
- **Michele Serra**, supervising Ph.D. thesis [103] since September 2017, Universität Konstanz
- **Simon Müller**, supervising Ph.D. thesis [104] since October 2016, Universität Konstanz
- **Lothar Sebastian Krapp**, supervising Ph.D. thesis [105] since October 2015, Universität Konstanz
- **Gabriel Lehericy**, co-supervising with University Paris 7 Denis-Diderot
Ph.D. thesis [106] September 2018
- **Katharina Dupont**, Ph.D. thesis [117], February 2015, Universität Konstanz,
- **Charu Goel**, Ph.D. thesis [118], August 2014, Universität Konstanz
- **Mehdi Ghasemi**, Ph.D. thesis [121], September 2012, University of Saskatchewan
- **Tim Netzer**, visiting pre-doctoral fellow May - September 2007, University of Saskatchewan
- **Pawel Gladki** Ph.D. thesis, co-supervised 2004 - 2007, University of Saskatchewan
- **Mahdi Zekavat** Ph.D. thesis, co-supervised [131] 1997 - 2000, University of Saskatchewan

NSERC Summer Undergraduate Awardees - University of Saskatchewan

- **Michael Hancock**, supervised [132], Summer 2005
- **Jonathan Lee**, supervised [133], Summer 2003
- **Brian Danchilla**, supervised [134], Summer 2003
- **Jonathan Lee**, supervised [135], Summer 2002
- **Chira Chilliack**, co-supervised [136] Summer 2000
- **Amy Mader**, co-supervised [137], Summer 1999
Currently analyst for the Treasury Board Branch, Saskatchewan Department of Finance
- **Chris Arbuthnott**, co-supervised [138] Summer 1999
Later completed M. Sc. in Mathematics, University of Waterloo

TEACHING RECORD (selected)

At the University of Bordeaux

- Mini-Course: Real closed fields and models of peano arithmetic,
(September 10 2018 - 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)
- Einführung in die o-minimale Geometrie (Seminar)

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)

- **Gleichstellungsbeauftragte der Universität Konstanz**, 2016 - 2017
- **Stellvertreterin der Hochschullehrerin im Gleichstellungsrat**
Universität Konstanz, 2015 - 2016
- **Internal Scientific Advisory Board Zukunftskolleg**
(Vertreterin des Fachbereichs Mathematik und Statistik), since January 2015
- **Pro-Dekan der mathematisch-naturwissenschaftlichen Sektion**
Universität Konstanz, 2014 - 2016
- **Fachbereichssprecherin des Fachbereichs Mathematik und Statistik**
Universität Konstanz, October 2014 - September 2016
- **Association for Symbolic Logic Committee for Logic in Africa**, 2014 -2016
- **Auswahlkommission Fellowships Zukunftskolleg**
Universität Konstanz, since September 2012
- **Fachbereichsrat Mathematik und Statistik**
Universität Konstanz, since September 2009
- **Ausschuss für Forschungsfragen**
Universität 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”**
(<http://www.ihp-raag.org/>): Local Coordinator for the Canadian Team application (2000 - 2002).
- **College of Reviewers Canada Research Chairs Program**
Member
- **College Graduate Studies & Research**
faculty representative, U of S Council, 2002 - 2003, University of Saskatchewan
- **Director; University Math Help Centre**
2001 - 2003, University of Saskatchewan
- **Colloquium Chair**
1997 - 2003, <http://math.usask.ca/colloquia/index.html>, University of Saskatchewan
- **College of Arts and Science Equity Committee**
member 2000 - 2003, University of Saskatchewan
- **University of Saskatchewan Faculty Association**
member Committee on Women issues 2002 - 2003

CONFERENCE ORGANIZATION (selected)

- **Konstanz Women in Mathematics (KWIM) - KWIM-Feststage**
Celebrating the end of the KIM-Project
Organizers: Maria Infusino - Salma Kuhlmann
6.-7. Decembetr 2018, Universität Konstanz
- **Real Algebraic Geometry and Model Theory (RAGMT)**
Organizers: Lothar Sebastian Krapp, Konstanz - Gabriel Lehericy, Paris - Patrick Michalski, Konstanz
- Simon Müller, Konstanz - Michele Serra, Konstanz
8.-9. October 2018, Universität Konstanz
- **Mini-Symposium: Real Geometry in Action**
during ”European Women in Mathematics General Meeting 2018“
(Graz, Austria, September 2018) – Co-organized with M. Infusino
- **Donau-Rhein Modelltheorie und Anwendungen (DRMTA)**
(Konstanz, May 2017) – Co-organized with P. Habegger, A. Martin-Pizarro, T. Kaiser, L. S. Krapp
and M. Thomas
- **Mathematisches Forschungsinstitut Oberwolfach**
(March 2017) – Co-organized with D. Henrion, M. Infusino and V. Vinnikov
Workshop: **Real Algebraic Geometry with a view toward Moment Problems and Optimization**
- **Mathematisches Forschungsinstitut Oberwolfach**
(December 2016) – Co-organized with A. Berarducci and P. Ehrlich
Mini-Workshop: **Surreal Numbers, Surreal Analysis, Hahn Fields and Derivations**

- **Department of Mathematics and Statistics, University of Saskatchewan**
(August 2016) – Co-organized with M. Ghasemi, F.-V. Kuhlmann, K. Kuhlmann and V. Vinnikov
The nineteenth Colloquiumfest - Dedicated to Murray Marshall
- **Washington University, St. Louis**
(July 2016) – Co-organized with M. Infusino and T. Kuna
IWOTA 2016 Special Session: Finite and infinite dimensional moment problems
- **Summer School in Tame Geometry**
(Konstanz, July 2016) – Co-organized with P. Eleftheriou (Chair), J. Pila, D. Plaumann and M. Thomas
<http://www.math.uni-konstanz.de/eleftheriou/summerschool/>
- **Andrejeweski-Tage 2016**
(Konstanz, April 2016) – Co-organized with S. Albeverio and M. Infusino
Moment problems in theoretical physics
<http://cms.uni-konstanz.de/math/andrejeweski-tage/>
- **DMV-Jahrestagung 2015**
(Hamburg, September 2015) – Co-organized with M. Infusino and T. Kuna
Mini-Symposium **Moment Problem and Applications** –
<http://www.math.uni-hamburg.de/DMV2015/acceptedminisymposia.html>
- **Tagung: Konstanz - Women in Mathematics 2015**
(Konstanz, June 2015) – Co-organized with C. Goel
<http://cms.uni-konstanz.de/math/kwim-2/>
- **Mathematisches Forschungsinstitut Oberwolfach**
(April 2014) – Co-organized with D. Henrion and V. Vinnikov
Workshop on **Real Algebraic Geometry With A View Toward Systems Control and Free Positivity** – <http://www.mfo.de/occasion/1415/>
- **DAAD conference: Naples - Konstanz: Model Theory Days**
(Naples November 2013) – Co-organized with P. D'Aquino – <http://cms.uni-konstanz.de/nkmtd/>
Funded by Bundesministerium für Bildung und Forschung.
- **DAAD conference: Konstanz - Naples: Model Theory Days**
(Konstanz December 2012) – Co-organized with P. D'Aquino – <http://cms.uni-konstanz.de/knmtd/>
Funded by Bundesministerium für Bildung und Forschung.
- **The Fields Institute**
(April 2009) – Co-organized with M. Matusinski
Workshop on **Differential Kaplansky Theory** –
<http://www.fields.utoronto.ca/programs/scientific/08-09/o-minimal/miniworkshops/>
- **Banff International Research Station**
(October 2006) – Co-organized with S. Lall, V. Powers, F. Sottile
Workshop on **Positive Polynomials and Optimization** – <http://www.pims.math.ca/birs>

- **Mini-Conference Topics in Real Algebraic Geometry**
(Saskatoon October 2006) – Dedicated to Professor Danielle Gondard, on the occasion of her 60th Birthday – <http://math.usask.ca/skuhlman/confgond.htm>
- **Sixth Annual Colloquiumfest on Positivity, the Multi-Dimensional Moment Problem and Noncommutative Real Geometry**
(Saskatoon April 2005) – For list of speakers and program see <http://math.usask.ca/marshall/collfest.html>
- **Fourth Annual Colloquiumfest on Model Theory and Ordered Algebraic Structures**
(Saskatoon March 2003) – For list of speakers and program see <http://math.usask.ca/fvk/mb4.htm>
- **Saskatchewan Mini-meeting**
(Saskatoon 2003) – For list of speakers and program see <http://math.usask.ca/fvk/skantm2.htm>
- **Saskatchewan Algebra and Number Theory Mini-meeting**
(Regina, 2002) – Co-organized with Dr. A. Herman – For list of speakers and program see <http://www.math.uregina.ca/aherman/skant02.html>
- **Third Annual Colloquiumfest in Algebraic Geometry, Real Algebraic Geometry and Computational Algebra**
(Saskatoon, March 2002) – For list of speakers and program see <http://math.usask.ca/fvk/Mb3.htm>.
- **CMS Summer Meeting 2001 in Saskatoon**
<http://math.usask.ca> – Organized with B. Hart and F.-V. Kuhlmann Session on Model Theoretic Algebra, plenary speaker Z. Chatzidakis
- **Second Annual Colloquiumfest in Real Algebraic Geometry and Model Theory**
(Saskatoon, March 2001) – For list of speakers and program see <http://math.usask.ca/fvk/Mb2.htm>
- **First Annual Colloquiumfest**
(Saskatoon, March 2000) – For list of speakers and program see <http://math.usask.ca/fvk/Mb.htm>
- **International Conference and Workshop on Valuation Theory**
(Saskatoon 1999) – For list of speakers and program see <http://math.usask.ca/fvk/annconf.html>
Sponsors: Fields, CRM and PIMS, U of S. 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, Institut for Mathematical Sciences; Program on Inverse Moment Problem, National University of Singapore, 11 November 2013 - 25 January 2014
- **Arbeitsgruppe: Dependent Fields and Definable Valuations** at the Universität Konstanz; WS 2010-2011
- **Oberseminar Modelltheorie** at the Universität Konstanz since 2010
- **Oberseminar Reelle Geometrie und Algebra** at the Universität Konstanz since 2009

- **Weizmann Institut, Israel** (July 2008): Invited to give a mini - course on “ Positive Polynomials and the multi-dimensional Moment Problem”.
- **Université Paris 6** (October 2007): Invited Professor to give a mini - course on “ Hilbert’s 17th Problem and Positive Polynomials”.
- **Centre Emile Borel, Institut Henri Poincaré** (Fall 2005): Invited Professor to give a mini - course on “Positive Polynomials and the Moment Problem”.
- **Groupe de Travail “o-minimalité, Transséries et Modèles non-Archimédiens”**
Co-organized with Professor J.-P. Ressayre, 2003–2004, resumed October -December 2007.
<http://www.logique.jussieu.fr/www.rambaud/GTL.html>
- **Seminar on Hardy Fields** 2002–2004. Seminar notes available on my homepage (ps file)
- **The Algebra and Logic Seminar since 1997**
(<http://math.usask.ca/fvk/algsem.htm>). Main topics: Model Theoretic Algebra and Real Algebraic Geometry. Speakers included: M. Aschenbrenner, V. Astier, E. Becker, I. Bonnard, H. Brungs, Z. Chatzidakis, J. Cimpric, M. Dickmann, R. Dorrego, P. Ehrlich, M. El Bachraoui, A. Fischer, J. Funk, M. Galatos, D. Gondard, T. Green, D. Haskell, U. Hermisson, K. Keimel, S. Khanduja, H. Knaf, F.-V. Kuhlmann, S. Kuhlmann, M. Marshall, C. Miller, E. Mosteig, M. Otero, H. Perdry, V. Powers, A. Prestel, S. Priess, M. Putinar, P. Roquette, H. Schoutens, C. Scheiderer, N. Schwartz, M. Schweighofer, K. Schmüdgen, P. Speissegger, M. Spivakovsky, C. Steinhorn, B. Teissier, M. Tressl, V. Vinnikov.
- **Mathematical Sciences Group Colloquium Series** 2001-2003.
(<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.
- **Cryptography Student Seminar** for students in mathematics and computer science organized with R. Auer, Summer 2002. <http://math.usask.ca/~marles/seminar.html>
- **Geometric Algebra seminar** (1999-2000) (my graduate students lectured on Artin’s book).
- **Seminar on Sturm Algebra** (Summer 1999)
for my undergraduate NSERC Students.
- **Seminar on Quasicrystals** (May 1999)
invited Prof. Moody, Prof. Weiss, Prof. Baake.
- **Algebra and Model Theory of Exponential Fields** Mini-Course given at Louisiana State University, Baton Rouge, USA (Spring 1996).
- **Model Theory** (co-organized with Prof. Gloede), University of Heidelberg (1995).
- **Exponential Fields** (co-organized with Prof. Roquette), University of Heidelberg (1993-94)

RESEARCH VISITS (selected)

- **Institut Henri Poincare**, Invited to participate to the Thematic Program Trimester Model Theory, Combinatorics and Valued Fields, IHP Paris, (January 8 - April 6 2018)
- **Instituto Tecnológico de Oaxaca**, Algebraic Geometry Session, Mexico, (September 7-11 2015)
- **University of Tbilisi**, IWOTA 2015, Georgia, (July 6-10 2015)

- **Schloss Rauischholzhausen**, European Women in Mathematics German Chapter, Germany (April 30 - May 2 2015)
- **University of Amsterdam**, IWOTA 2014, The Netherlands, (July 2015)
- **Nanyang Technological University Singapore**, Program on Inverse Moment Problems, (January 6-18 2014)
- **Université de Mons**, Belgium, (November 18-25 2013)
- **University of Bordeaux**, Bordeaux, (May 27 - June 2 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**, (September 30 - October 15 2012 and April 1 - April 8 2011)
- **University of Bordeaux**, Bordeaux, (April 30 - May 6 2012)
- **Institut Henri Poincaré**, Paris, (February 27 - March 5 2012)
- **Universität Münster**, Münster, (April 27 - May 1 2011)
- **Punjab University**, Chandigarh, India (March 2009)
- **The Fields Institute**, Invited to participate to the Thematic Program on o-minimal structures and real analytic geometry (January–July 2009)
- **Sabbatical Leave** July–December 2007, University of Ljubljana, Slovenia and **Equipe de Logique**, CNRS, Univ. Paris 7, and LAAS, Toulouse. (September – 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 September 12 to December 16, 2005
- **Institut Henri Poincaré** I have been asked to give a course on “Positive Polynomials and the Moment Problem”.
- **University of Norwich, UK** Invited by Prof. M. Dzamonja, May 2005
- **Sabbatical Leave** September 2003–July 2004. Equipe de Logique, CNRS, Univ. Paris 7
- **Universidad Autonoma Madrid** One week (invited by Prof. M. Otero, November 2003)
- **University of Ljubljana, Slovenia** Two weeks (invited by J. Cimpric, January 2004)
- **University of Regensburg, Germany** One week (invited by M. Tressl, February 2004)
- **University of Bonn, Germany** Two weeks (invited by Prof. Koepke, May 2004)
- **TU Darmstadt, Germany** 1 week (invited by Prof. K. Keimel, July 2003)
- **Fields Institute** *Set Theory and Analysis Program*, 1 week (Fall 2002)
- **Rutgers University** 1 week (invited by Prof. S. Shelah, October 2001)
- **Département de Mathématiques, Université du Maine** Le Mans, France, 1 week (invited by Prof. Giraudet, June 1998)
- **Mathematical Sciences Research Institute**, Berkeley, Visiting Member for *Model Theory of Fields* Program (May - June 1998)

- **Fields Institute**, Toronto, Visiting Member *Emphasis Year on Algebraic Model Theory: Geometric Model Theory, and Model Theory of Analytic Functions* (1996-97)
- **Special Semester on Real Algebraic Geometry and Ordered Algebraic Structures** Louisiana State University, Baton Rouge. Participant, (Spring 1996)
- **Bowling Green University** 1 week (invited by Profs. C. Holland & S. McCleary, 1995)
- **Tata Institute**, Bombay. 1 week (invited by Prof. Parimala , March 1995)
- **Punjab University** Chandigarh, India. 3 months research visit (invited by Profs. Sankaran and Khanduja)

RESEARCH VISITORS (selected)

At the University of Konstanz (since July 2009)

- **Prof. Didier Henrion**, (LAAS-CNRS, University of Toulouse – November 2017)
- **Prof. Deirdre Haskell**, (McMaster University Ontario – May 2017)
- **Prof. Dr. Walter Craig**, (McMaster University Ontario – May 2017)
- **Prof. Didier Henrion**, (LAAS-CNRS, University of Toulouse – April 2017)
- **Prof. Raúl Curto**, (University of Iowa – February 2017)
- **Prof. Alessandro Berarducci**, (Università di Pisa – February 2017)
- **Prof. Pawel Gladki**, (Uniwersytet Slaski, Kattowitz/Akademia Górniczo-Hutnicza – December 2016)
- **Dr. William Bradley-Williams**, (Heinrich-Heine-Universität Düsseldorf – November 2016)
- **Lorenzo Galeotti**, (Universität Hamburg – February 2016)
- **Dr. Pablo Cubides**, (Université de Caen Normandie – January 2016)
- **Dr. Mikaël Matusinski** (Université de Bordeaux – July 2015, July 2011, October 2010)
- **Prof. Paola D'Aquino** (Seconda Università di Napoli – June 2015, January 2015, June 2012, February 2012, May 2011, October 2010)
- **Dr. Sandra Lang** (Technische Universität Darmstadt – June 2015)
- **Prof. Françoise Point** (Mons, Belgien – May 2015, July 2011, June 2010)
- **Samaria Montenegro** (Université Paris Diderot – April 2015)
- **Prof. Prof. Murray Marshall** (University of Saskatchewan – February 2015)
- **Serge Randriambololona** (Galatasaray /Üniversitesi – February 2015)
- **Prof. Florian Pausinger** (Technische Universität München – February 2015)
- **Dr. Arthur Paul Pedersen**, (Max-Planck-Institut für Bildungsforschung Berlin – June 2014)
- **Dr. William Anscombe**, (University of Oxford – June 2013)
- **Dr. Pantelis Eleftheriou**, (University of Waterloo, Canada – June 2013)
- **Dr. Krysztof Krupinski**, (Uniwersytetu Wroclawskiego, Polen – May 2013)
- **Dr. Artem Chernikov**, (Hebrev University of Jerusalem – May 2013)
- **Dr. Maurice Chiodo**, (University of Melbourne – December 2012)

- **Dr. Tamara Servi** (Centro de Matemática e Aplicações Fundamentais, Lissabon – November 2012)
- **Prof. Zoe Chatzidakis** (Equipe le Logique Mathematique, Paris 7 – July 2012)
- **Dr. A. Hasson** (Ben Gurion, Israel – June 2012)
- **Prof. Danielle Gondard** (Université Paris VI – June 2012)
- **Prof. David Marker** (University of Illinois at Chicago – May 2012)
- **Dr. Karen Lange** (Wellesley College, USA – May 2012, May 2011)
- **Prof. Philipp Hieronymi** (University of Illinois at Urbana-Champaign – May 2012)
- **Prof. Patrick Speissegger** (McMaster University, Ontario – May 2012)
- **Prof. Dr. Katrin Tent** (Universität Münster – October 2011)
- **Prof. Dr. Jochen Koenigsmann** (University of Oxford – July 2011)
- **Dr. Antongiulio Fornasiero** (Universität Münster – July 2011)
- **Prof. Dr. Roland Speicher** (Universität des Saarlandes – May 2011)
- **Prof. Dr. Tobias Kaiser** (Universität Passau – May 2011)
- **Arne Grenzebach** (Universität Bremen – April 2011)
- **Dr. Antongiulio Fornasiero** (Universität Münster – February 2011)
- **Prof. Dr. Heike Mildenerger** (Universität Freiburg – January 2011)
- **Pierre Simon** (Ecole Normale Superieure de Paris – December 2010)
- **Prof. Mirna Dzamonja** (University of East Anglia, Norwich – December 2010)
- **Franziska Jahnke** (University of Oxford – December 2010)
- **Prof. Julia Knight** (University of Notre Dame, Chicago – July 2010)
- **Dr. Marcello Mamino** (Scuola Normale Superiore di Pisa – June 2010)
- **Prof. Mikhail Kotchetov** (Memorial University, St. John's – June 2010)
- **Prof. Marcus Tressl** (Manchester – April 2010)
- **Dr. Olivier Le Gal** (Chambéry – December 2009)
- **Dr. Carla Fidalgo** (Coimbra – November 2009)

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/>), Universität Konstanz
- **Founding of “Konstanz Frauen in der Mathematik: Wege in Studium und Beruf” (KWIM)**
(<https://www.mathematik.uni-konstanz.de/kuhlmann/wim.htm>), Universität Konstanz
- **Forschungsschwerpunkt “Reelle Geometrie und Algebra”**
(<https://www.mathematik.uni-konstanz.de/rag>), Universität Konstanz
- **Research Unit Algebra and Logic**, University of Saskatchewan (<http://math.usask.ca/fvk/algg.htm>).
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.
See <http://www.usask.ca/communications/ocn/02-sep-06/feature06.shtml>
- **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 13th, 2005.

RESEARCH CONTRIBUTIONS

EDITORIAL

- [1] Mathematisches Forschungsinstitut Oberwolfach, Report No. 14/2017
DOI: 10.4171/OWR/2017/14
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.
- [2] Mathematisches Forschungsinstitut Oberwolfach, Report No. 60/2016
DOI: 10.4171/OWR/2016/60
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
- [3] Mathematisches Forschungsinstitut Oberwolfach, Report No. 17/2014
DOI: 10.4171/OWR/2014/17
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

- [4] 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

BOOKS

- [5] 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

- [6] Krapp, L. S. - Kuhlmann, S., – Lehericy, G.
On Strongly NIP Ordered Fields and definable convex valuations, (2018)
- [7] Berarducci, A. - Kuhlmann, S. - Mantova, V. - Matusinski, M.:
Exponential fields and Conway's omega-map, (2018)
- [8] Kotchetov, M. – Kuhlmann, S.:
Orthogonal groups over valued fields, (2011)
- [9] Kuhlmann, S.:
Differential Fields of kappa-bounded Power Series, (2005)

REFEREED PUBLISHED ARTICLES

- [10] Dupont, K. – Hasson, A. – Kuhlmann, S.:
Definable Valuations induced by multiplicative subgroups and NIP Fields,
To appear in "Archive for Mathematical Logic" (2018)
- [11] Kuhlmann, S. – Müller, S.:
Compatibility of quasi-orderings and valuations; A Baer-Krull Theorem for quasi-ordered Rings,
ORDER - A Journal on the Theory of Ordered Sets and its Applications, (2018)
DOI: 10.1007/s11083-018-9465-4
- [12] Kuhlmann, S. – Lehericy, G.:
The differential rank of a differential-valued field,
Mathematische Zeitschrift, (2018)
DOI: 10.1007/s00209-018-2132-z
- [13] Ghasemi, M. – Infusino, M. – Kuhlmann, S. – Marshall, M.:
Moment problem for symmetric algebras of locally convex spaces,
Integral Equations and Operator Theory, (2018) 90: 29.
DOI: 10.1007/s00020-018-2453-7

- [14] Kuhlmann, S. – Lehericy, G.:
A Baer-Krull theorem for quasi-ordered groups
ORDER - A Journal on the Theory of Ordered Sets and its Applications, (2017) 35: 283.
DOI: 10.1007/s11083-017-9432-5
- [15] Kuhlmann, S.:
Murray A. Marshall (24.3.1940 - 1.05.2015); A brief mathematical obituary
(Proc. IWOTA 2015, R. Duduchava, M. Kaashoek, N. Vasilevskii, and V. Vinnikov, eds)
Operator Theory Advances and Applications, Volume 262, 13-20, Springer International Publishing
(2018)
- [16] Infusino, M. – Kuhlmann, S. – Marshall, M.:
On the determinacy of the moment problem for symmetric algebras of a locally convex space
(Proc. IWOTA 2015, R. Duduchava, M. Kaashoek, N. Vasilevskii, and V. Vinnikov, eds)
Operator Theory Advances Applications, Volume 262, 243-250, Springer International Publishing
(2018).
- [17] Kuhlmann, S. – Matusinski, M. – Point, F.:
The valuation difference rank of a quasi-ordered difference field
Groups, Modules and Model Theory - Surveys and Recent Developments
in Memory of Rüdiger Göbel, Springer Verlag, 399-414 (2017)
- [18] Infusino, M. – Kuhlmann, S.:
Infinite dimensional moment problem: open questions and applications
Proceedings of the Conference on Ordered Algebraic Structures and Related Topics.
Edited by: F. Broglia, F. Delon, M. Dickmann, D. Gondard, and V. Powers
AMS Contemporary Mathematics (CONM), Volume 697, 187-201, (2017)
- [19] Kuhlmann, F.-V. – Kuhlmann, S.:
*Valuation theory of exponential Hardy fields II: Principal parts of germs in the Hardy field of o-minimal
exponential expansions of the reals*
Proceedings of the Conference on Ordered Algebraic Structures and Related Topics.
Edited by: F. Broglia, F. Delon, M. Dickmann, D. Gondard, and V. Powers
AMS Contemporary Mathematics (CONM), Volume 697, 227-237, (2017)
- [20] Goel, C. – Kuhlmann, S. – Reznick, B.:
The analogue of Hilbert's 1888 theorem for Even Symmetric Forms
Journal of Pure and Applied Algebra, Volume 221, Issue 6, 1438-1448 (2017)
- [21] Carl, M. – D'Aquino, P. – Kuhlmann, S.:
On the value group of a model of Peano Arithmetic
Forum Mathematicum, 29(4), 951-957 (2017)
DOI: <https://doi.org/10.1515/forum-2015-0226>
- [22] Ghasemi, M. – Kuhlmann, S. – Marshall, M.:
Moment problem in infinitely many variables
Israel Journal of Mathematics, Vol. 212, 989-1012 (2016)

- [23] Goel, C. – Kuhlmann, S. – Reznick, B.:
On the Choi-Lam analogue of Hilbert's 1888 theorem for Symmetric Forms
Linear Algebra and Applications, 496, 114-120 (2016)
- [24] D'Aquino, P. – Kuhlmann, S.:
A note on \aleph_α - saturated o -minimal expansions of real closed fields
Algebra and Logic, Vol. 54, No. 6, 502-506 (January 2016)
(Russian Original Vol. 54, No. 6 (November-December 2015))
- [25] D'Aquino, P. – Kuhlmann, S. – Lange, K.:
A valuation theoretic characterization of recursively saturated real closed fields
Journal of Symbolic Logic, Volume 80, Issue 1, 194-206 (2015)
- [26] Kuhlmann, S. – Matusinski, M.:
The exponential-logarithmic equivalence classes of surreal numbers
ORDER - A Journal on the Theory of Ordered Sets and its Applications,
Volume 32, Issue 1, 53-68 (2015)
- [27] Ghasemi, M. – Kuhlmann, S. – Marshall, M.:
Application of Jacobi's Representation Theorem to locally multiplicatively convex topological real Algebras
Journal of Functional Analysis, 266 Issue 2, 1041-1049 (2014)
- [28] Kuhlmann, S. – Matusinski, M. – Shkop, A.C.:
A Note on Schanuel's Conjectures for Exponential Logarithmic Power Series Fields
Archiv der Mathematik, 100, 431-436 (2013)
- [29] Ghasemi, M. – Kuhlmann, S. – Samei, E.:
The Moment Problem for Continuous Positive Semidefinite Linear Functionals
Archiv der Mathematik, 100, 43-53 (2013)
- [30] Ghasemi, M. – Kuhlmann, S.:
Closure of the cone of sums of $2d$ -powers in real topological algebras
Journal of Functional Analysis, 264 Issue 1, 413-427 (2013)
- [31] D'Aquino, P. – Knight, J. – Kuhlmann, S. – Lange, K.:
Real Closed Exponential Fields
Fundamenta Mathematicae **219**, 163-190 (2012)
- [32] Kuhlmann, S. – Tressl, M.:
Comparison of Exponential-Logarithmic and Logarithmic-Exponential series
Math. Log. Quart. **58**, No. 6, 434-448 (2012)
- [33] Kuhlmann, S. – Matusinski, M.:
Hardy type derivations in generalized series fields
Journal of Algebra **351**, 185-203, (2012)
- [34] Kovacec, A. – Kuhlmann, S. – Riener, C.:
A Note on extrema of linear combinations of elementary symmetric functions
Journal of Linear and Multilinear Algebra, **60**, Issue 2, 219-224 (2012)

- [35] Kuhlmann, S. – Matusinski, M.:
Hardy type derivations on fields of exponential logarithmic series
Journal of Algebra **345**, 171-189 (2011)
- [36] Kuhlmann, S. – Marshall, M. – Osiak, K.:
Cyclic 2-structures and spaces of orderings of power series fields in two variables
Journal of Algebra, **335** 36-48 (2011)
- [37] Kuhlmann, S.:
A Family of Logarithmic Functions of Distinct Growth Rates
Central European Journal of Mathematics **8**(6), 1026-1028 (2010)
- [38] Fornasiero, A. – Kuhlmann, F.-V. – Kuhlmann, S.:
Towers of complements and truncation closed embeddings of valued fields
Journal of Algebra **323**, 574-600 (2010)
- [39] Cimpric, J. – Kuhlmann, S. – Marshall, M.: *Positivity in power series rings*
Advances in Geometry **10** 135-143 (2010)
- [40] Kuhlmann, F.-V. – Kuhlmann, S. – Lee, J.:
Valuation bases for (generalized) algebraic series fields
Journal of Algebra **322**, 1430-1453 (2009)
- [41] Kuhlmann, S. – Putinar, M.:
Positive Polynomials on Projective Limits of Real Algebraic Varieties
Bulletin des sciences mathematiques **133**, 92-111 (2009)
- [42] Cimpric, J. – Kuhlmann, S. – Scheiderer, C.:
Sums of Squares and Invariant Moment Problems in Equivariant Situations
Transactions Amer. Math. Soc. **361**, no 2, 735-765 (2009)
- [43] Kuhlmann, S. – Putinar, M.:
Positive Polynomials on Fibre Products
C. R. Acad. Sci. Paris, Ser. **1344**, 681-684 (2007)
- [44] Biljakovic, D. – Kochetov, M. – Kuhlmann, S.:
Primes and Irreducibles in Truncation Integer Parts of Real Closed Fields
Logic, Algebra and Arithmetic, Lecture Notes in Logic, Vol **26**,
Association for Symbolic Logic, AK Peters, 42–65 (2006)
- [45] Kuhlmann, S. – Shelah, S.:
 κ -bounded Exponential-Logarithmic power series fields
Annals for Pure and Applied Logic **136**, 284-296, (2005)
- [46] Kuhlmann, S. – Marshall, M. – Schwartz, N.:
Positivity, sums of squares and the multi-dimensional moment problem II
Advances in Geometry **5**, 583–607 (2005)

- [47] Holland, W. C. - Kuhlmann, S. - McCleary, S.:
Lexicographic Exponentiation of chains
J. Symb. Logic **70**, 389–409 (2005)
- [48] Kuhlmann, F.-V. – Kuhlmann, S. – Shelah, S.:
Functorial equations for lexicographic products
Proc. Amer. Math. Soc. . **131** 2969–2976 (2003)
- [49] Kuhlmann, F.-V. – Kuhlmann, S.:
Valuation theory of exponential Hardy fields I
Math. Zeitschrift. **243**, 671–688 (2003)
- [50] Kuhlmann, S. – Marshall, M.:
Positivity, sums of squares and the multi-dimensional moment problem
Trans. Amer. Math. Society, **354**, 4285–4301 (2002)
- [51] Kuhlmann, F.-V. – Kuhlmann, S. – Marshall, M. – Zekavat, M.:
Embedding ordered fields in formal power series fields
Journal of Pure and Applied Algebra **169**, 71–90 (2002)
- [52] Kuhlmann, F.-V. – Kuhlmann, S.:
The exponential rank of nonarchimedean exponential fields
Real Algebraic Geometry and Ordered Structures, Contemporary Mathematics **253**,
AMS, 181–201 (2000)
- [53] Kuhlmann, S.:
Infinitary properties for valued and ordered vector spaces
J. Symb. Logic **64**, 216–226 (1999)
- [54] Kuhlmann, F.-V. – Kuhlmann, S. – Shelah, S.:
Exponentiation in power series fields
Proc. Amer. Math. Soc. **125**, 3177–3183 (1997)
- [55] Kuhlmann, F.-V. – Kuhlmann, S.:
Ax-Kochen-Ershov principles for valued and ordered vector spaces
Ordered Algebraic Structures (ed. C. Holland & J. Martinez),
Kluwer Academic Publishers, 237–259 (1997)
- [56] Kuhlmann, S.:
Valuation bases for extensions of valued vector spaces
Forum Math. **8**, 723–735 (1996)
- [57] Kuhlmann, S.:
Isomorphisms of lexicographic powers of the reals
Proc. Amer. Math. Soc. **123**, 2657–2662 (1995)
- [58] Kuhlmann, S.:
On the structure of nonarchimedean exponential fields I
Archive for Math. Logic **34**, 145–182 (1995)

- [59] Kuhlmann, F.-V. – Kuhlmann, S.:
On the structure of nonarchimedean exponential fields II
Communications in Algebra **22**, 5079–5103 (1994)
- [60] Alling, N. L. – Kuhlmann, S.:
On η_α -groups and fields
Order **11**, 85–92 (1994)
- [61] Kuhlmann, S.:
Groupes abéliens divisibles ordonnés
Séminaire sur les Structures Algébriques Ordonnées, Sélection d'exposés 1984–1987, Vol. 1,
Publications mathématiques de l'Université Paris VII, 3–14 (1990)

OTHER REFEREED CONTRIBUTIONS

- [62] **Habilitationsschrift:** *Ordered Exponential Fields*, 128 pages (1999)
- [63] **Ph.D. Thesis:** *Quelques propriétés des espaces vectoriels valués en théorie des modèles*
Equipe de Logique Mathématique de Paris VII, Prépublications **27**, Paris (1991)

NON REFEREED CONTRIBUTIONS (selected)

- [64] Kuhlmann, S.:
Approximation of positive polynomials by sums of squares. A short overview
Structures Algébriques Ordonnées, Séminaire Paris VII (February 2009)
- [65] Kuhlmann, F.-V. – Kuhlmann, S.:
Explicit construction of exponential-logarithmic power series
Prépublications Paris 7 **No 61**, Séminaire Structures Algébriques Ordonnées, Séminaires **1995-1996**
- [66] Kuhlmann, F.-V. – Kuhlmann, S.:
Residue fields of arbitrary convex valuations on restricted analytic fields with exponentiation
Fields Institute Preprints, (1996)
- [67] Kuhlmann, S.:
A remark on the classification problem for ordered structures
Prépublications Paris 7, Séminaire Structures Algébriques Ordonnées, Séminaires **1987–1988**
- [68] Kuhlmann, S.:
Chaînes uniquement transitives
Prépublications Paris 7, Séminaire Structures Algébriques Ordonnées, Séminaires **1985–1986**

REVIEW ARTICLES (selected)

- [69] Kuhlmann, S.: Book Review of Aschenbrenner, M. - van den Dries, L. - van der Hoeven, J.: *Asymptotic Differential Algebra and Model Theory of Transseries*
Jahresbericht der Deutschen Mathematiker-Vereinigung, 120(4), 297–302 (2018)
- [70] Kuhlmann, S.: Book Review of Dales, G. – Woodin, H.:
Super – Real Fields
LMS Monographs, New Series **14**, Clarendon Press Oxford (1996),
Review in Bull. London Math. Soc. **31**, 248–256 (1999)
- [71] Kuhlmann, S.: 2 entries for the Encyclopaedia of Math. (ed. Hazewinkel):
Model theory of the real exponential function / o-minimal (1996)

PUBLISHED ABSTRACTS FOR INVITED TALKS (selected)

- [72] *Fields of generalized power series*
Colloquium Logicum 2012, Paderborn, Germany, September 13-15, (2012)
- [73] *Positivity, sums of squares, and the moment problem*
IWOTA 2012, Sydney, Australia, July 16-20 (2012)
- [74] *The Moment Problem for Continuous Linear Functionals*
Session on Algebraic Geometry, Moments and Optimization 2011
SIAM Conference on Applied Algebraic Geometry, October 6-9, North Carolina, USA (2011).
- [75] *The General Moment Problem*
Workshop in honor of Professor Bill Helton UCSD, San Diego, USA, October 2-4 (2010).
- [76] *Closures of Quadratic Modules in Locally Convex Topologies*
Special Session on Operator Theory with Algebraic Connections.
IWOTA 2010, Berlin, Germany, July 12-16 (2010).
- [77] *Positivity in Power Series Ring*
Special Session on Real Algebraic Geometry and Applications,
MTNS 2010, Budapest, Hungary, July July 5–9 (2010)
- [78] *Valued Differential Fields*
Mal'tsev Meeting 2010 In honour of Y.L. Ershov, Novosibirsk, Russia, May 2-6 (2010).
- [79] *Exponential - Logarithmic Series Fields*
Session Surreal Numbers, Joint Mathematics Meetings. San Francisco, USA, January 13-16 (2010).
- [80] *Positive polynomials on projective limits of real algebraic varieties*
Special Session on Real algebraic geometry,
MTNS 2008, Virginia Tech, Blacksburg, USA, July 28–August 1 (2008)

- [81] *Towers of complements and truncation closed embeddings of valued fields*
Association for Symbolic Logic Annual Meeting, Gainesville, Florida, USA, (2007)
- [82] *Approximation of positive polynomials by sums of squares*
IMA Annual Program Year, Workshop Optimization and Control, Minneapolis (2007)
- [83] *Positive polynomials and Invariant Theory*
MTNS conference, Polynomial Inequalities and Applications, Kyoto, Japan (2006)
- [84] *Integer parts and complements to valuation rings*
Canadian Math. Society Summer Meeting, Calgary (2006)
- [85] *Positivity in Real Algebraic Geometry*
CARTHAPOS06, Carthage, Tunis (2006)
- [86] *Hausdorff's Lexicographic Chains*
Keldysh International Conference and Workshop, Moscow State University, Russia, (2004)
- [87] *On G-Invariant Moment Problems*
Workshop on Algorithmic, Combinatorial and Applicable Real Algebraic Geometry,
MSRI Berkeley USA, (2004)
- [88] *Primes and Irreducibles in Power Series Rings, Part I and Part II*
Workshop and Conference on Logic, Algebra and Arithmetic, IPM Tehran, Iran (2003)
- [89] *Lexicographic Exponentiation of Chains*
Sixth Annual Conference in Ordered Algebraic Structures,
Vanderbilt University, Nashville, Tennessee, USA (2003)
- [90] *Representation of Polynomials Positive on Subsets of the Real Line,
with Applications to the Multidimensional Moment Problem*
First Joint International Meeting American Mathematical Society & Real Sociedad Matem.
Espanola, Seville, Spain. (2003)
- [91] *Lexicographic Orderings*
LMS Regional Meeting, Birmingham, UK. (2002)
- [92] *The Exponential-Logarithmic Power Series Fields*
CUNY Logic Workshops, New York City, USA (2001)
- [93] *Exponential Fields*
Symposium in Mathematics in honor of Professor Saharon Shelah, winner of the Bolyai and Wolf
Prizes, Ben Gurion University , Israel (2001)
- [94] *Ordered Exponential Fields*
Association for Symbolic Logic Annual Meeting, University of Pennsylvania, USA (2001)
- [95] *Lexicographic Orderings*
Canadian Math. Society Summer Meeting (2001)

- [96] *A maximality property for the Hardy field of the expansion by real powers and restricted analytic functions*
Canadian Mathematical Society Summer Meeting (2000)
- [97] *Hardy fields of arbitrary models of polynomially bounded plus exp expansions*
American Mathematical Society Winter Meeting (1999)
- [98] *The Exponential-Logarithmic power series field*
Meeting on Model Theory of Fields Oberwolfach (1998)
- [99] *The Growth rates of exponentials in models of real exponentiation*
Association for Symbolic Logic Annual Meeting (1998)
- [100] *Ordered Algebraic Structures: Some current research directions*
Meeting Canadian Women in Mathematics (1998)

ARTICLES AND THESIS FROM RESEARCH THAT I SUPERVISED

- [101] Gühr, Ruben: *Eine Abhandlung über die Galoistheorie - Charakterisierung von Galoisweiterungen und konstruierbare Zahlen*,
Bachelor Thesis, Universität Konstanz (2018)
- [102] Hess, Sarah-Tanja: *Elliptic curves and their application in key exchange cryptography*,
Bachelor Thesis, Universität Konstanz (2018)
- [103] Serra, Michele: *Automorphism Groups of Hahn Groups and Hahn Fields*,
Ph.D. Thesis, Universität Konstanz (2017-)
- [104] Müller, Simon: *Quasi ordered commutative rings; a uniform approach to preorderings and valuations*,
Ph.D. Thesis, Universität Konstanz (2016-)
- [105] Krapp, Lothar Sebastian: *On the structure of non-archimedean o-minimal exponential fields*,
Ph.D. Thesis, Universität Konstanz (2015-)
- [106] Lehericy, Gabriel: *The differential valuative rank of a differential valued field*,
Ph.D. Thesis, Universität Konstanz (2018)
- [107] Steinmeyer, Pia: *Über die Prolösbarkeit der absoluten Galoisgruppe von \mathbb{Q}_p* ,
Bachelor Thesis, Universität Konstanz (2018)
- [108] Schick, Moritz: *Surreale Zahlen*,
Bachelor Thesis, Universität Konstanz (2018)
- [109] Michalski, Patrick: *On Schmüdgen's fiber theorems for moment problems*,
M. Sc. thesis, Universität Konstanz (2017)
- [110] Jindadu, Isaac Ayoola: *A study of the Hamburger moment problem on the real line*,
M. Sc. thesis, Universität Konstanz (2017)

- [111] Gütlein, Sophie Linnea: *The ordered field of real numbers with exponentiation: model completeness, decidability and Schanuel's conjecture*,
M. Sc. thesis, Universität Konstanz (2017)
- [112] Walder, Natalia: *Exponentiation in non-archimedean ordered fields*,
M. Sc. thesis, Universität Konstanz (2017)
- [113] Yao, Siqi: *Positive polynomials and sum of squares in formal power series rings*,
M. Sc. thesis, Universität Konstanz (2016)
- [114] Loeffler, Fabian: *Die Kryptologie - eine Anwendung der Zahlentheorie und ihre Einbindung in den Mathematikunterricht*,
Zulassungsarbeit für Lehramt, Universität Konstanz (2016)
- [115] Kiefer, Renate: *Konstruktionen mit Zirkel und Lineal - Eine Anwendung der Galois-Theorie mit Beispielen für den gymnasialen Schulunterricht*,
Zulassungsarbeit für Lehramt, Universität Konstanz (2016)
- [116] Ulber, Peter *Ordnungstypen von Modellen schwacher Arithmetiken*,
Diplom-Arbeit, Universität Konstanz (2015)
- [117] Dupont, Katharina: *Definable valuations on NIP fields*,
Ph.D. Thesis, Universität Konstanz (2015)
- [118] Goel, Charu: *Extension of Hilbert's 1888 Theorem to Even Symmetric Forms*,
Ph.D. Thesis, Universität Konstanz (2014)
- [119] Gengelbach, Arve: *Über die Charakterisierung irreduzibler Potenzreihen anhand ihres ordinalen Ordnungstyps*,
Diplom, Universität Konstanz (2014)
- [120] Michalski, Patrick: *Determinantal Representations of Homogeneous Polynomials in Few Variables and Those Expressible as a Product of Linear Polynomials*,
Bachelor Thesis, Universität Konstanz (2014)
- [121] Ghasemi, Mehdi: *Polynomial Optimization and the Moment Problem*,
Ph.D. Thesis, University of Saskatchewan (2012)
- [122] Harde, Johanna: *Über die Wertegruppe einer differentiellen Bewertung*,
M. Sc. Thesis, Universität Konstanz (2011)
- [123] Vogt, Lisa: \aleph_1 *freie Gruppen*,
Bachelor Thesis, Universität Konstanz (2011)
- [124] Parsch, Fabian: *Geometrie und Topologie in ω -minimalen Strukturen*,
Bachelor Thesis, Universität Konstanz (2010)
- [125] Schachtner, Markus: *Dichte lineare Anordnungen*,
Bachelor Thesis, Universität Konstanz (2010)

- [126] Rapp, Marin: *Complex Analysis in ω -minimal structures: Fundamental Theory and Applications*, Bachelor Thesis, Universität Konstanz (2010)
- [127] Haias, Manuela: *On the value group of exponential and differential ordered fields*, M.Sc. Thesis, University of Saskatchewan (2007)
- [128] Fan, Wei: *Non-negative polynomials on compact semi-algebraic sets in one variable case*, M.Sc. Thesis, University of Saskatchewan (2006)
- [129] Green, Trevor: *Properties of chain products and Ehrenfeucht–Fraïssé Games on Chains*, M.Sc. Thesis, University of Saskatchewan (2002)
- [130] Chun, Hyunku: *The orthogonal group of an elliptic space*, M.Sc. Thesis, University of Saskatchewan (2001)
- [131] Zekavat, Mahdi: *Orderings, cuts and formal power series*, Ph.D. Thesis, University of Saskatchewan (2000)

NSERC undergraduate papers, University of Saskatchewan

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

SELECTED INVITED TALKS (since 2003 only)

Academic Year 2018 – 2019

- **Real closed fields and Peano arithmetic**
Institut de Mathématiques de Toulouse, France (October 7 2018)
- **Positive polynomials and moment problems**
Multidisciplinary Optimization Seminar in Toulouse, France, (October 1 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 7 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 3 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 (May 29 2018)
- **Real closed fields and models of Peano arithmetic**
Seminarios de Álgebra Conmutativa-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 Yampus of Ben-Gurion University of the Negev, Isreal (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 3 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 9 2016)
- **Real Closed Fields and Models of Peano Arithmetic,**
Logic Seminar at Mathematical Institute, University of Oxford, UK (March 3 2016)
- **New Pathways between Group Theory and Model Theory,**
Conference in memory of Rüdiger Göbel (1940 - 2014),
Mülheim an der Ruhr, Germany (February 2 2016)
- **Exponential-logarithmic power series fields and the surreal numbers,**
AMS.MMA Joint Mathematics Meetings, Seattle, USA (January 8 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 (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 8 2015)
- **Moment problem in infinitely many variables,**
IWOTA 2015 - International Workshop on Operator Theory and Applications,
Tbilisi, Georgia (July 6 2015)
- **Application of the Archimedean Positivstellensatz to locally multiplicatively convex real algebras,**
EWM German Chapter, Schloss Rauschholzhausen (May 2 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, Kanada (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 9 2013)
- **Colloquium**, University of Saskatchewan, Canada (October 4 2013)

Academic Year 2012 – 2013

- **Colloquium and Seminaire de Géométrie**,
Institut de Mathématiques de Bordeaux 1, (May 30-31, 2013)
- **Logic Seminar**, HUJ (January 2 2013)
- **Seminaire sur les structures algébriques ordonnées**, Paris 7 (November 2012)
- **GTM - Géométrie et Théorie des Modèles**, Institut Henri Poincaré, Paris (November 2012)
- **Logic Seminar**, University of Manchester, UK (October 2012)
- **Logic Seminar**, Seconda Università di Napoli, Caserta, Italy (October 2012)
- **Colloquium Logicum 2012**, Paderborn (September 13-15 2012)
- **IWOTA 2012** Sydney, Australia (July 16-20 2012)

Academic Year 2011 – 2012

- **Seminaire Géométrie**, Institut de Mathématiques de Bordeaux (May 2012)
- **Real Algebraic Geometry Workshop 2012**, Universität Magdeburg (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**, Universität Freiburg (May 2011)
- **Oberseminar Modelltheorie, Geometrie und Gruppentheorie**, Universität Münster (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** Universität Leipzig (February 2011)
- **Logic Seminar** CMAF, Universidade de Lisboa (February 2011)
- **Logic and Set Theoretic Topology Seminar**, Ben Gurion University, Israel (January 2011)
- **Seminaire sur les structures algébriques ordonnées**, Paris 7 (January 2011)
- **Seminaire général de Logique**, Paris 7 (January 2011)

- **Seminaire Algèbre et Géometrie**, Université de Versailles - Saint-Quentin, France (January 2011)
- **Oberseminar Mathematische Logik**, Universität Bonn (December 2010)
- **Logic Seminar**, University of Oxford, UK (December 2010)
- **Workshop in honor of Professor Bill Helton**, UCSD, San Diego, USA (October 2010)
- **Algebra and Logic Seminar**, University of Saskatchewan, Canada (September 2010)
- **Special Session Real Algebraic Geometry & Applications**, MTNS 2010, Budapest (July 2010)
- **Special Session on Operator Theory with Algebraic Connections**, IWOTA 2010, Berlin, Germany (July 2010)

Academic Year 2009 – 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 (March 2009)
- **Special Session on Concrete Aspects of Real Positive Polynomials**, AMS Central Meeting 09, Urbana, Illinois (March 2009)
- **Special Session on Real Algebraic Geometry, Applications and Related Topics**, MTNS 08, Blacksburg, Virginia (July 2008)

Academic Year 2007 – 2008

- **Special Session on Model Theory and Applications to Geometry**, CMS-SMF joint Meeting, University of Montreal; invited speaker (June 2008)
- **Special Session on Real Algebra and its interactions with Functional Analysis**, LAW'08, Kranjska Gora, Slovenia (May 2008)
- **Seminaire Structures Algébriques Ordonnées**, Paris 7; invited speaker (May 2008)
- **Logic Seminar Notre Dame University**, South Bend (November 2007)
- **Logic Seminar Université de Mons-Hainaut**, Belgique 3 talks (November 2007)
- **Seminaire Général de Logique**, Paris 7; invited speaker (November 2007)

Academic Year 2006 – 2007

- **Journées en l'Honneur de Max Dickmann**, Univ. Paris 7; invited speaker (June 2007)
- **Seminaire Equations Différentielles**, Université de Bourgogne; invited speaker (June 2007).
- **Special Session on Contemporary Model Theory and its Applications**, CMS Summer Meeting University of Manitoba, Winnipeg ; invited speaker (June 2007)
- **Prairies Mini-Meeting**, Univ. of Regina; invited speaker (May 2007)
- **Math Colloquium**, Ben Gurion Univ; invited speaker (April 2007)
- **Set Theory Seminar**, Ben Gurion Univ.; invited speaker (April 2007)
- **Algebraic Geometry Seminar**, Ben Gurion Univ.; invited speaker (April 2007)
- **Set Theory Seminar**, Hebrew Univ.; invited speaker (April 2007)
- **Algebra Seminar**, Univ. of Haifa invited speaker (two talks) (April 2007)
- **Seminar Reelle Algebraische Geometrie**, Univ. Regensburg; invited speaker (March 2007)
- **Seminaire Général de Logique**, Paris 7; invited speaker (March 2007)
- **Seminaire Structures Algébriques Ordonnées**, Paris 7; invited speaker (March 2007)
- **Workshop on Real Algebraic Geometry**, Oberwolfach; invited participant (March 2007)
- **Association for Symbolic Logic Annual Meeting**
University of Florida, Gainesville; plenary speaker (March 2007)
- **Workshop on Optimization and Control**,
IMA, University of Minnesota, Minneapolis; plenary speaker (January 2007)
- **Workshop “Positive Polynomials and Optimization”**,
BIRS; organizer and participant (October 2006)
- **Colloque o-minimalité**, Equipe de Logique, CNRS Paris 7; participant (September 2006)
- **Mini-Symposium on Polynomial Inequalities and Applications**,
Kyoto, Japan, organizers: Bill Helton, Pablo Parrilo, Mihai Putinar; invited participant (July 2006)

Academic Year 2005 – 2006

- **CARTHAPOS06 A Workshop on Positivity**, Tunis; invited participant (June 2006)
- **Special Session on Model Theory**,
Annual Meeting of the Canadian Mathematical Society, Calgary; invited speaker (June 2006)
- **Workshop on Extreme Forms of real algebraic varieties**, AIM,
Palo Alto, organizers: Ilia Itenberg, Grigory Mikhalkin, Oleg Viro ; invited participant (April 2006)
- **Model Theory Seminar**,
McMaster, Hamilton Differential fields of exponential-logarithmic power series (February 2006)
- **Seminaire général de Logique**,
Université Paris 7, Paris: Corps Différentiels de séries exponentielles-logarithmiques (November 2005)
- **Seminaire Algèbre et Géométrie**,
Université de Versailles - Saint-Quentin, Versailles: Polynômes positifs et problème des moments
(3 talks) and Corps de Transséries (November-December 2005)

Academic Year 2004-2005

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

Academic Year 2003-2004

- **Keldysh International Conference and Workshop**,
Moscow State University, Russia: *Hausdorff's Lexicographic Chains*, (August 2004)
- **Colloquium, Zagreb University**: *Hilbert's 17th problem & moment problem*, (June 2004)
- **Colloquium, Université d'Angers**, France: *Le Probleme des Moments*, (June 2004)
- **Kolloquium, Universität Bonn**, Germany: *Positivstellensatz & Moment Problem*, (May 2004)
- **Kolloquium Logikum**,
Universität Bonn, Germany: *κ -bounded Exponential-Logarithmic power series fields*. (May 2004)
- **Workshop on Algorithmic, Combinatorial and Applicable Real Algebraic Geometry**,
MSRI Berkeley USA: *On G-Invariant Moment Problems*, (April 2004)
- **Seminaire Algèbre et Géométrie**,
Université de Versailles Saint-Quentin, France: *Primes and Irreducibles in Ordered Group and Power Series Rings*, 3 Talks (March, May, June 2004)
- **Algebra Seminar**,
University of Pisa, Italy: *Exponential Integer Parts of Exponential Fields*, (March 2004)
- **Séminaire de Structures Algébriques Ordonnées**,
Université Paris 7, France: *Positivstellensatz et le Problème des Moments*, (March 2004).
- **Séminaire général de Logique**,
Université Paris 7 , France: *Corps de series Exponentielles Logarithmiques κ -bornées*, (February 2004)
- **Seminar Reelle Algebraische Geometrie**,
Universität Regensburg , Germany: *Primes and Irreducibles in Power Series Rings*, (February 2004)
- **Colloquium Cairo University**, Egypt: *A talk on Real Closed Fields*, (January 2004)
- **Algebra Seminar Universidad Autonoma**
Madrid, Spain: *Primes and Irreducibles in Exponential Integer Parts of Ordered Exponential Fields*.(December 2003)
- **Séminaire général de Logique**,
Université Paris 7, France: *Lexicographic Exponentiation of Chains*. (November 2003)
- **Workshop and Conference on Logic, Algebra and Arithmetic**,
IPM Tehran, Iran: *Primes and Irreducibles in Power Series Rings*. 2 Talks (October 2003)
- **Colloquium, Shiraz University**, Iran: *A talk on Model Theory*. (October 2003)