

Curriculum vitæ

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PERSONAL INFORMATION

Position **Research associate** at the University of Luxembourg, Luxembourg.

PROFESSIONAL EXPERIENCES

- 2014-2019 **Research associate** in the Mathematical Research Unit (in the Research group of Professor Martin Schlichenmaier), University of Luxembourg, Luxembourg.
- 2013-2014 **EPSRC Post-doctoral Research Assistant** to Prof. Iain Gordon, University of Edinburgh, Edinburgh, United Kingdom.
- 2012-2013 **Post-doctoral fellow**, Max-Planck-Institut für Mathematik, Bonn, Germany.
- 2011-2012 **Teaching Assistant**, Université Pierre et Marie Curie (Paris VI).
- 2009-2011 **Teaching assistant**, Université René Descartes (Paris V).
- 2008-2009 **Teaching Assistant**, Kansas-State-University (U.S.A).

EDUCATION

- 2008-2012 **Ph.D in Mathematics** under the supervision of Pierre Schapira at the Université Pierre et Marie Curie-Paris VI. Defended on the 20th June 2012. Title: *Sur la catégorie triangulée des DQ -modules*, with highest honor.
- 2006-2008 **Master of Mathematics**, Université Pierre et Marie Curie (Paris VI), with high honors.
- 2005-2006 **Licence of Mathematics**, Université Pierre et Marie Curie (Paris VI), with highest honors.

PUBLICATIONS AND PREPRINTS

- [1] Integral representation theorems for deformation quantization modules, with D. Gepner, in preparation (62 pages written).
- [2] Tempered subanalytic topology on algebraic varieties, arXiv:1703.00870, 2017.
- [3] Quantization of spectral curves and DQ-modules, *To appear in Journal of Non-commutative Geometry*, 2017.
- [4] The codimension-three conjecture for holonomic DQ-modules, arXiv:1406.7074, 2014 (submitted).
- [5] Fourier-Mukai transform in the quantized setting, *Advances in Mathematics*, Volume 256, 1-17, 2014.
- [6] Lefschetz-Lunts formula for deformation quantization modules, *Mathematische Zeitschrift*, 273, no. 3-4, 1119-1138, 2013.
- [7] DG Affinity of DQ-modules, *International Mathematics Research Notices*, 2012(6):1414-1438, 2012.
- [8] A Riemann-Roch Theorem For DG Algebras, *Bulletin de la SMF*, 141(2):197-223, (2013).

REPORTS

- [9] Quantization of spectral curves and DQ-modules, *Oberwolfach Reports*, Volume 13, Issue 1, 2016, 432-433.
- [10] The codimension-three conjecture for holonomic DQ-modules, *Oberwolfach Reports*, Volume 11, Issue 2, 2014, 1385-1387.

RESEARCH INTERESTS

Algebraic and Analytic geometry, DQ-modules, D-modules, deformation quantization, Fourier-Mukai Transforms, derived algebraic geometry, non-commutative algebra, homological algebra, ∞ -categories.

RESEARCH VISITS

- July 2017 Max Planck Institute for Mathematics (Bonn, Germany)
- February 2017 University of Pennsylvania (Philadelphia, Pennsylvania, U.S.A), (invited by Professor Tony Pantev).
- October 2015 Purdue University (West Lafayette, Indiana, U.S.A), (invited by Professor David Gepner).
- January 2015 University of California, Davis (Davis, California, U.S.A), (invited by Professor Motohico Mulase).
- January 2015 Purdue University (West Lafayette, Indiana, U.S.A), (invited by Professor David Gepner).
- June 2014 Purdue University (West Lafayette, Indiana, U.S.A), (invited by Professor David Gepner).
- September-October 2010 Research Institute for Mathematical Sciences (Kyoto, Japan), (invited by Professor Masaki Kashiwara).

TEACHING

- 2015-2017 University of Luxembourg (Luxembourg)
Master level course *Riemann Surfaces* (Fall 2016)
Tutorial for *Basic algebraic structures* (Fall 2015), algebra course for Computer Sciences master's students.
- 2013-2014 University of Edinburgh (UK)
Lectures and tutorials for SMSTC algebra and basic algebra.
- 2011-2012 Université Pierre et Marie Curie (France).
In charge of 2 recitation classes for Analysis I in L1.
In charge of 2 recitation classes for Linear Algebra II in L1
10 hours of mock oral exams in *Algebra and Geometry* in L2 of mathematics.
- 2009-2011 Université Paris Descartes (France).
In charge of a recitation class for *Mathématiques et Calcul II* (basic analysis).
- 2008-2009 Kansas-State-University (U.S.A).
Recitation classes for *Calculus and Analytic Geometry II* and *Calculus and Analytic Geometry III*.

MANAGEMENT, ADMINISTRATIVE AND SERVICE ACTIVITIES

- 2017 Coorganizer of the conference *QUANTMOD-Quantization and Moduli Spaces*, 9th-13th of January 2017, Luxembourg.
- Since 2015 Coorganizer of the *Working Group Algebra, Geometry and Quantization*, University of Luxembourg, (Luxembourg). website: <http://math.uni.lu/~wgschlich/>
Coorganizer of the *Ph.D student's seminar* of the mathematic departement of the University of Luxembourg. website: <http://math.uni.lu/docsem/>

- 2014-2015 Organizer (with Jérémy Toulisse) of the *Working group on Geometry of moduli spaces and topological recursion*, University of Luxembourg, (Luxembourg).
- 2013-2014 Organizer (with Michael Wemyss) of the *Reading seminar on Higher Algebra*, University of Edinburgh, (U.K).
- 2010-2012 Representative of the Ph.D students at the board of the mathematical Ph.D school of Institut Mathématiques de Jussieu.
- may 2009 Co-organizer of the *Graduate Student Research Conference in Algebra and Representation Theory*, Kansas State University, (U.S.A).

TALKS

- 2017 **Towards a tempered GAGA theorem**, Mathematical physics seminar, University of Pennsylvania, U.S.A (February).
- 2016 **Géométrie analytique tempérée**, séminaire de géométrie algébrique, Université d'Angers, France (November).
Cohomologically enriched categories and DQ-modules, Lens Topology and geometry 2016, Université d'Artois, Lens, France (November).
Quantization of spectral curves and DQ-modules, Noncommutative Geometry and Higher Structures, Università di Perugia, Italy (Juillet).
Quantization of spectral curves and DQ-modules, Algebra seminar, University of Antwerp, Belgium (April).
Une brève introduction aux faisceaux pervers, ANR SAT, Montpellier, France (April).
Quantization of spectral curves and DQ-modules, Topological Recursion and TQFTs, MFO, Oberwolfach, Germany (February).
Quantification des courbes spectrales et DQ-modules, Séminaire de physique mathématique et de topologie algébrique, Université d'Angers, France (January).
- 2015 **Quantization of spectral curves and DQ-modules**, Seminari Geometria Algebraica, Universitat de Barcelona/Universitat Politècnica de Catalunya, Spain (October).
Quantification des courbes spectrales via les DQ-modules, Séminaire Analyse, Géométrie et Algèbre, Université de Lorraine, France (Mai).
Un théorème de représentation intégrale pour les DQ-modules, Séminaire de Géométrie Algébrique, Université Montpellier 2, France (Avril).
The codimension-three conjecture for holonomic DQ-modules, Topology seminar, Purdue University, U.S.A (January).
- 2014 **An integral representation theorem for DQ-modules**, 2014-2015 Warwick EPSRC Symposium: DG-enhancements and higher category methods, Warwick, United Kingdom (December).
The codimension-three conjecture for holonomic DQ-modules, Rencontre annuelle du GDR 2875 Topologie Algébrique et Applications, Clermont Ferrand, France (October).

- The codimension-three conjecture for holonomic DQ-modules**, Interactions between Algebraic Geometry and Noncommutative Algebra, MFO, Oberwolfach, Germany (May).
- The codimension-three conjecture for holonomic DQ-modules**, algebra seminar, University of Glasgow, United Kingdom (March).
- Fourier-Mukai transform in the quantized setting**, Oberseminar Algebra, University of Cologne, Cologne, Germany (January).
- 2013 **Fourier-Mukai transform in the quantized setting**, MAXIMALS algebra seminar, University of Edinburgh, Edinburgh, United Kingdom (September).
- Transformée de Fourier-Mukai pour les DQ-modules**, Topology and Algebra seminar, I.R.M.A, Strasbourg, France (March).
- DG-affinité des DQ-modules**, Geometry, Topology and Algebra seminar, Laboratoire de Mathématiques Jean Leray, Nantes, France (January).
- 2012 **Hochschild homology and cohomology of coherent sheaves**, Seminar on derived categories of coherent sheaves, MPIM, Bonn, Germany (December).
- DG-affinité des DQ-modules**, Algebra and Geometry seminar, Laboratoire de Mathématiques Nicolas Oresme, Caen, France (November).
- 2012 **An introduction to DQ-modules**, Higher Differential Geometry Seminar, MPIM, Bonn, Germany (October).
- DG-affinity of DQ-modules**, MPI-Oberseminar, MPIM, Bonn, Germany (August).
- 2011 **Un théorème de Riemann-Roch pour les dg-algèbres**, Topology seminar, Université de Lille 1, Lille, France (October).
- Un théorème de Riemann-Roch pour les dg-algèbres**, Rencontre annuelle du GDR 2875 Topologie Algébrique et Applications, Nantes, France (September).
- DG-affinité des DQ-modules**, Algebraic analysis seminar, Institut de Mathématiques de Jussieu, Paris, France (May).
- DG-affinité des DQ-modules**, Groupe de travail Algèbre et Topologie Homotopiques, Institut de mathématiques de Jussieu, Paris, France (April).
- De la quantification par déformation aux DQ-algèbres**, Séminaire des thésards de l'Institut de mathématiques de Jussieu, Paris, France (March).
- 2010 **A Riemann-Roch Theorem for dg-algebras**, Algebraic Analysis and Geometry, Università degli Studi di Padova, Padova, Italy (June).
- Un théorème de Riemann-Roch pour les dg-algèbres**, Algebra seminar, Institut Camille Jordan, Lyon, France (May).
- 2008 **An introduction to A-infinity algebras**, Algebra Seminar, Kansas State University, Manhattan K.S, U.S.A (December).

Mini-course

- 2013 **Une introduction aux DQ-modules** (3 hours), Laboratoire de Mathématiques Jean Leray, Nantes, France (January).

LANGUAGES

French native speaker.
English fluent (level roughly corresponds to an overall IELTS score of 7).
German elementary notions.