Lory Aintablian

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Curriculum vitae

"There is geometry in the humming of the strings, there is music in the spacing of the spheres." – Pythagoras

Research interests

Higher structures in differential geometry, Lie groupoids and Lie algebroids, deformation theory, simplicial structures and category theory.

Education

 Max Planck Institute for Mathematics (MPIM), Bonn, Germany PhD in Mathematics Advisors: Christian Blohmann, Catharina Stroppel
University of Bonn, Bonn, Germany
 MS in Mathematics (with high distinction) Thesis: Deformations of group and groupoid representations Advisors: Christian Blohmann, Catharina Stroppel
American University of Beirut (AUB), Beirut, LebanonO BS in Mathematics (with distinction)
 Lebanese National Higher Conservatory of Music, Beirut, Lebanon Baccalaureate Diploma in Piano Performance Focus: music theory, harmony, chamber music

Honors and awards

- 2014 Muhanna Mathematics Award of Excellence, "Outstanding senior Lebanese Mathematics student", AUB
- 2011 2014 **Dean's Honor List**, having an average of 85/100 and above, AUB
 - 2011 Hariri Award, second highest grade in governmental exams in Bekaa, Lebanon
 - 2011 **Prize from Institute of Education of Lebanon**, success of governmental exams with high distinction

Scholarships

- 2018 2023 Hausdorff Scholarship, Bonn International Graduate School of Mathematics
- 2014 2016 International Scholarship, Armenian General Benevolent Union
- 2014 2015 Lucy Kasparian Aharonian Scholarship, Armenian International Women's Association

Talks in conferences and workshops

- 03/2024 **Differentiation of elastic diffeological groupoids**, 59th Seminar Sophus Lie, University of Würzburg
- 06/2023 L_{∞} -algebroids of higher groupoids in tangent categories, Representations in higher structures, University of Greifswald
- 12/2022 **Higher Lie algebroids as ends in tangent categories**, Atelier on higher structures in differential geometry I, Institut Camille Jordan, Université Claude-Bernard Lyon (online)
- 08/2021 **The Lie algebroids of diffeological groupoids**, A finite and infinitedimensional meeting on Lie groupoids, Poisson geometry and integrability, Wolfgang Pauli Institute, Vienna (online)

• Selected talks in seminars

- 04/2024 The abstract Lie algebroid of a differentiable groupoid, *IMPRS seminar*, MPIM Bonn
- 02/2023 Differentiation of higher Lie groupoids in tangent categories, Weekly Poisson workshops, Katholieke Universiteit Leuven
- 07/2022 L_{∞} -algebroids of higher groupoids in tangent categories, Oberseminar Geometrie, University of Würzburg
- 06/2022 The Van Est isomorphism, IMPRS seminar, MPIM Bonn
- 11/2021 Lie algebroid cohomology, representations and morphisms, *IMPRS* seminar, MPIM Bonn
- 05/2020 Introduction to supermanifolds and the de Rham complex, *IMPRS* seminar, MPIM Bonn (online)
- 12/2019 L_{∞} -algebras in multisymplectic geometry; The simplicial Maurer-Cartan functor, *IMPRS seminar*, MPIM Bonn
- 05/2019 Operadic bar-cobar adjunction, IMPRS seminar, MPIM Bonn
- 11/2018 **The model category dgLa**, Learning seminar on deformation theory, MPIM Bonn
- 01/2018 **Deformations of group and groupoid representations**, Geometry seminar, University of Göttingen
- 07/2017 **Deformations of Lie group actions**, *Master's thesis seminar*, University of Bonn
- 06/2017 Geometrical constructions using only a ruler, Basic notions seminar, Bonn International Graduate School of Mathematics
- 04/2016 Central functions and characters, Seminar on representation theory of the symmetric group, University of Bonn
- 02/2016 Volume of minimal submanifolds, Seminar on steklov eigenvalues and minimal surfaces, University of Bonn
- 04/2014 Geometrical constructions using only a ruler, *Higher geometry course*, American University of Beirut

Attended conferences and workshops

- 05/2024 Higher Geometric Structures along the Lower Rhine XVII, MPIM Bonn
- 11/2023 Atelier on Higher Structures in Differential Geometry II, Institut Camille Jordan, Université Claude-Bernard Lyon, France
- 09/2023 Poisson Geometry, Higher Structures, and Deformation Theory, University of Würzburg, Germany
- 04/2023 Higher Structures in Geometry and Mathematical Physics, CIRM, Marseille, France
- 02/2023 Higher Geometric Structures along the Lower Rhine XVI, Utrecht University, Netherlands
- 11/2022 **Higher Geometric Structures along the Lower Rhine XV**, Radboud University Nijmegen, Netherlands
- 07/2022 Poisson 2022 Advanced School, CRM, Barcelona, Spain (online)
- 02/2022 Differentiable Stacks, Poisson Geometry and Related Geometric Structures, SRS, Les Diablerets, Switzerland (online)
- 03/2020 Higher Geometric Structures along the Lower Rhine XIV, MPIM Bonn
- 10/2019 Deformations and Rigidity in Algebra, Geometry and Analysis, University of Würzburg, Germany
- 06/2019 **Higher Geometric Structures along the Lower Rhine XIII**, Utrecht University, Netherlands
- 12/2018 Poisson aan de Waal, Radboud University Nijmegen, Netherlands
- 02/2018 Workshop in Deformation Theory III, University of Bari, Italy
- 04/2017 Young Women in Geometry, MPIM Bonn

	Organization of workshops and seminars
Summer semester 2019 - present	Seminar on higher geometric structures and mathematical physics, coorganizer, MPIM Bonn
10/2023	Higher differential geometry in the Bonn-Göttingen-Würzburg- groupoid, coorganizer, PhD Colloquium, Kloster Höchst
06/2023	Higher differential geometry in the Bonn-Göttingen-Würzburg- groupoid, <i>coorganizer</i> , PhD Colloquium, Bad Münster am Stein
Winter semester $2019/20$	Seminar on factorization algebras, coorganizer, University of Bonn

	Teaching experience
Summer semester 2022	Riemannian geometry, tutor, University of Bonn
Winter semester $2021/22$	Analysis and geometry on manifolds, <i>tutor</i> , University of Bonn

Summer semester	Riemannian geometry, tutor, University of Bonn
2020	
Summer semester 2019	Geometry of classical field theory, assistant, University of Bonn
Winter semester 2018/19	Differential geometry, assistant, University of Bonn

Outreach

- 04/2024 Graduate Research Opportunities for Women (GROW@Bonn 2024), panelist, MPIM Bonn
- 03/2023 Graduate Research Opportunities for Women (GROW@Bonn 2024), volunteer, Hausdorff Center for Mathematics, Bonn

Languages

Armenian native **German** full professional proficiency **English** full professional proficiency **Arabic** limited working proficiency

IT skills

SoftwareExcellent knowledge in MS-Office (Word, Excel, PowerPoint)ProgrammingExcellent knowledge in Java, MATLAB, R, Python, HTML, LATEX

References

Dr. Christian Blohmann, Max Planck Institute for Mathematics, Bonn Tel.: +49 (0) 228 402302 Email: blohmann@mpim-bonn.mpg.de

Prof. Dr. Madeleine Jotz, *Mathematical Institute*, University of Würzburg Tel.: +49 (0) 931 3187977 Email: madeleine.jotz@uni-wuerzburg.de

Prof. Dr. Catharina Stroppel, *Mathematical Institute*, University of Bonn Tel.: +49 (0) 228 736838 Email: stroppel@math.uni-bonn.de

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