

# Lory Aintablian

## Curriculum vitae

Max Planck Institute for Mathematics  
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*“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

- 10/2018 - present **Max Planck Institute for Mathematics (MPIM)**, Bonn, Germany
- PhD in Mathematics
  - Advisors: Christian Blohmann, Catharina Stroppel
- 10/2014 - 11/2017 **University of Bonn**, Bonn, Germany
- MS in Mathematics (with high distinction)
  - Thesis: *Deformations of group and groupoid representations*
  - Advisors: Christian Blohmann, Catharina Stroppel
- 09/2011 - 05/2014 **American University of Beirut (AUB)**, Beirut, Lebanon
- BS in Mathematics (with distinction)
- 09/2008 - 08/2014 **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*

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## Talks in conferences and workshops

- 03/2024 **Differentiation of elastic diffeological groupoids**, *59th Seminar Sophus Lie*, University of Würzburg
- 06/2023  **$L_\infty$ -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 infinite-dimensional meeting on Lie groupoids, Poisson geometry and integrability*, Wolfgang Pauli Institute, Vienna (online)

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## Selected talks in seminars

- 02/2023 **Differentiation of higher Lie groupoids in tangent categories**, *Weekly Poisson workshops*, Katholieke Universiteit Leuven
- 07/2022  **$L_\infty$ -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  **$L_\infty$ -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  $\mathbf{dgLa}$** , *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

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## Attended conferences and workshops

- 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
- 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

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## Teaching experience

- Summer semester 2019 - present **Seminar on higher geometric structures and mathematical physics**, *coorganizer*, MPIM Bonn
- Summer semester 2022 **Riemannian geometry**, *tutor*, University of Bonn
- Winter semester 2021/22 **Analysis and geometry on manifolds**, *tutor*, University of Bonn
- Summer semester 2020 **Riemannian geometry**, *tutor*, University of Bonn
- Winter semester 2019/20 **Seminar on factorization algebras**, *coorganizer*, University of Bonn
- Summer semester 2019 **Geometry of classical field theory**, *assistant*, University of Bonn
- Winter semester 2018/19 **Differential geometry**, *assistant*, University of Bonn

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## Languages

**Armenian** *native*

**German** *full professional proficiency*

**English** *full professional proficiency*

**Arabic** *limited working proficiency*

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## IT skills

**Software** Excellent knowledge in MS-Office (Word, Excel, PowerPoint)  
**Programming** Excellent knowledge in Java, MATLAB, R, Python, HTML, L<sup>A</sup>T<sub>E</sub>X

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## References

**Dr. Christian Blohmann**, *Max Planck Institute for Mathematics*, Bonn  
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**Prof. Dr. Madeleine Jotz**, *Mathematical Institute*, University of Würzburg  
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**Prof. Dr. Catharina Stroppel**, *Mathematical Institute*, University of Bonn  
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