

Alejandro Ovalle

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Education	Since 05.2026 <i>Ph.D., Mathematics: Algebraic Geometry, University of Hannover.</i> Project: Tropical correspondences for log-GW invariants and Gross–Siebert program. Supervised by Dr. Tim Gräfnitz 10.2023 - 02.2026 <i>M.Sc., Mathematics: Algebra and Geometry, University of Bonn.</i> Thesis: "Enumerative geometry of K3 surfaces: BPS and stable pair invariants". Supervised by Prof. Richard Thomas and Prof. Daniel Huybrechts 10.2020 - 09.2023 <i>B.Sc., Mathematics, University of Bonn.</i> Thesis: "Formulae for smooth cubic surfaces: quadruples of points and twisted cubics". Supervised by Prof. Daniel Huybrechts and Dr. Gebhard Martin 02.2014 - 12.2019 <i>B.Sc., Physics, Universidad Nacional de Colombia.</i> Thesis: "Gravity as a Chern-Simons theory in (2+1)-dimensions". Supervised by Prof. Eduardo Rodriguez
Research interests	Enumerative algebraic geometry, moduli problems, derived categories.
Teaching and Research	11.2025 - 03.2026 Research Internship: Interactions between enumerative and tropical geometry, Max Planck Institute - MiS, Nonlinear Algebra Group. 04.2024 - 09.2025 Teaching Assistant, University of Bonn: Algebraic geometry II, Algebraic geometry I and Commutative algebra. 10.2021 - 09.2022 Teaching Assistant, University of Bonn: Linear algebra I, Analysis I.
Selected talks	Emmy Noether Seminar, University of Hannover Talk: "Enumerative geometry of K3s: stable pairs and BPS invariants" Nonlinear Algebra Seminar, Max Planck Institute - MiS Talk: "Enumerative geometry: Tropical correspondences and challenges" Algebraic curves Workshop, Max Planck Institute - MiS Talk: "Curves on surfaces and intersection theory"
Participation in conferences	31.08.2026 - 04.09.2026 Workshop: Moduli of curves, abelian varieties and K3 surfaces, Erdős Center 24.08.2026 - 28.08.2026 Simons School: Moduli of curves, abelian varieties and K3 surfaces, Erdős Center 07.01.2026 - 19.01.2026 Workshop: Algebraic curves, Max Planck Institute - MiS. Talk: "Curves on surfaces and intersection theory" 06.10.2025 - 10.10.2025 ReMoLD School on Representations, motives and Langlands duality, University Duisburg-Essen 10.06.2025 - 12.06.2025 Workshop: Curves on K3s and hyperkählers, University of Bonn 02.09.2024 - 06.09.2024 Trieste Algebraic Geometry Summer School - Tropical geometry and moduli spaces of curves, ICTP
Further academic activities	02.2025 - 07.2025 Organisation of reading seminar on Derived equivalences and Moduli, University of Bonn (More information on my website) 08.2024 - 01.2025 Organisation of reading seminar on Moduli spaces of stable sheaves, University of Bonn (More information on my website)

Honors

10.2023 - 02.2026 Full scholarship for Master's program from the Friedrich-Ebert-Stiftung.

More information: <https://www.fes.de/studienfoerderung>

12.2021 - 09.2023 Full scholarship for Bachelor's program from the Friedrich-Ebert-Stiftung.

More information: <https://www.fes.de/studienfoerderung>

**Further
qualifications**

Languages: Spanish (Native), English (C1), German (C1)