Ian Gleason

Born: May 21, 1992 in Mexico City, Mexico • Nationality: Mexican, Lithuanian
Languages: Spanish, English • Email: ianandre@math.uni-bonn.de

Education

PhD in Mathematics, UC Berkeley Aug 2015 - Aug 2021
Thesis Title: Specialization maps for Scholze's category of diamonds.
Supervisor: Sug Woo Shin

BA in Mathematics, UNAM Mexico Aug 2010 - Nov 2014
Thesis Title: El antiprisma (The antiprism).
Supervisor: Isabel Hubard

Current Position

Postdoctoral Position, Mathematical Institute of the University of Bonn Sep 2021 - Present
Funded by DFG via Scholze's Leibniz-Preis.

Publications

Peer-Reviewed Articles

Ian Gleason. Perfectoid Nullstellensatz: Results and counterexamples. *Proceedings of the American Mathematical Society (To appear)*, 2022. To appear

Ian Gleason and João Lourenço. Tubular neighborhoods of local models. *Duke Mathematical Journal (To appear)*, 2022a. To appear

Ian Gleason and Isabel Hubard. The antiprism of an abstract polytope. *ARS Mathematica Contemporanea*, 20(1):100–118, 2021

Ian Gleason and Isabel Hubard. Products of abstract polytopes. *Journal of Combinatorial Theory, Series A*, 157:287–320, 2018

Preprints

Ian Gleason and Alexander B. Ivanov. Meromorphic vector bundles on the Fargues–Fontaine curve. 2023

Ian Gleason and João Lourenço. On the connectedness of p-adic period domains. 2022b

Ian Gleason, Dong Gyu Lim, and Yujie Xu. The connected components of affine Deligne–Lusztig varieties. 2022

Johannes Anschütz, Ian Gleason, João Lourenço, and Timo Richarz. On the p-adic theory of local models. 2022

Ian Gleason. On the geometric connected components of moduli spaces of p-adic shtukas and local Shimura varieties. 2021a

Ian Gleason. Specialization maps for Scholze's category of diamonds. 2021b

Works in Progress

Ian Gleason. On the theory of kimberlites. In preparation

Ian Gleason, Linus Hamann, Alexander B. Ivanov, João Lourenço, and Konrad Zou. Comparing the two local Langlands categories. In preparation

Professional Experience and Achievements

Talks in Conferences

- "Meromorphic vector bundles on the Fargues–Fontaine curve", The Arithmetic of the Langlands Program Conference, Jun 2023, Hausdorff Research Institute for Mathematics.
- "The connected components of affine Deligne–Lusztig varieties and p-adic period domains", Oberwolfach Workshop, Feb 2023, Mathematisches Forschungsinstitut Oberwolfach.
- "On the p-adic theory of local models", 30 Rencontres Arithmétiques de Caen, May 2022, Université de Caen.
- "Variedades de Shimura locales" (Expository), 5th Meeting of Mexican Mathematicians in the World, Dec 2021, BIRS-Casa Matemática Oaxaca.
- "On the geometric connected components of unramified local Shimura varieties", Midwest Representation Theory Conference, Oct 2020, Virtual Conference.
- "An introduction to p-divisible groups" (Expository), 50° Congreso Nacional de la Sociedad Matemática Mexicana, Dec 2017, Instituto de Matemáticas, UNAM, Mexico City, Mexico.
- "Products in abstract polytopes and the antiprism", Kaleidoscope Conference in honor of Javier Bracho, May 2014, Ixtapa Zihuatanejo, Mexico.

Teaching Experience

Universität Bonn, Bonn, NRW
Lehrperson, Algebraic Geometry I (V4A1) and Algebraic Geometry II (V4A2) 2023 - 2024

UC Berkeley, Berkeley, CA
Teaching Assistant, Various courses including Linear Algebra, Graduate Course on Abstract Algebra, and Calculus 2015 - 2020

UNAM, Mexico City, Mexico
Teaching Assistant A, Logic I 2013

Master Students

Universität Bonn, Bonn, NRW
Nico Wolf. *On connected components of moduli space of local shtukas at infinite level.* 2024

Felix Zillinger. *The analytic stack of isocrystals* 2024

Zhen Huang. *To be determined* 2024 (expected)

Awards and Scholarships

Kenneth Ribet & Lisa Goldberg Award in Algebra, Mathematics Department of UC Berkeley 2020-2021
UC-MEXUS CONACYT Doctoral Fellowship for Mexican students 2017-2021

Service

Reviewed articles for Annals of Mathematics, Inventiones, Proceedings of the American Mathematical Society, Algebra and Number Theory, Selecta, and the Journal of Number Theory.