Ian Gleason

ianandre@math.uni-bonn.de

Born: May 21, 1992. Mexico City.
Nationality: Mexican, Lithuanian.
Languages: Spanish, English.

Education

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

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

Currently

Postdoctoral position in Universität Bonn, funded by DFG via Scholze's Leibniz-Preis.

Talks in Conferences

"The connected components of affine Deligne–Lusztig varieties and p-adic period domains" *Oberwolfach workshop: Arithmetic of Shimura varieties.*
Mathematisches Forschungsinstitut Oberwolfach. Feb 2023

"On the p-adic theory of local models" *30 Rencontres arithmétiques de Caen.*
Université de Caen. May 2022

"Variedades de Shimura locales" (Expository) *5th Meeting of Mexican Mathematicians in the World.*
BIRS-Casa Matemática Oaxaca. Dec 2021

"On the geometric connected components of unramified local Shimura varieties" *Midwest Representation Theory Conference 2020.*
Virtual Conference: Oct 2020
`https://homepage.divms.uiowa.edu/~mkrishna/2020mrtc/program.html`

"An introduction to p-divisible groups" (Expository) 50° *Congreso Nacional de la Sociedad Matemática Mexicana.*
Instituto de Matemáticas, UNAM. Mexico City, Mexico. Dec 2017

"Products in abstract polytopes and the antiprism" *Kaleidoscope: A conference in honor of Javier Bracho.* May 2014
Ixtapa Zihuatanejo, Mexico.

Talks in seminars as invited speaker.

"The connected components of affine Deligne–Lusztig varieties in mixed characteristic" *Universität Duisburg-Essen. Oberseminar.*
Nov 2022

"The connected components of affine Deligne–Lusztig varieties in mixed characteristic" *Universität Münster. Mittagsseminar zur Arithmetik.*
Oct 2022

"Tubular neighborhoods of local models" *MPIM, Arbeitsgemeinschaft Arithmetische Geometrie.*
Apr 2022

"The formal geometry of the local models" *CUHK, Representation and Number Theory seminar.*
Mar 2022

"The specialization principle for p-adic kimberlites" *MPIM, Arbeitsgemeinschaft Arithmetische Geometrie.*
Nov 2021

"On the geometric connected components of moduli of p-adic shtukas" *CIMAT, Seminario álgebra conmutativa y geometría algebraica.*
Apr 2021

"On the geometric connected components of moduli of p-adic shtukas" *MIT, number theory seminar*

Mar 2021

"On the geometric connected components of moduli of p-adic shtukas" *University of Michigan, umich.zoom.us*

Jan 2021

Preprints

Ian Gleason and João Lourenço. On the connectedness of p-adic period domains. *arXiv preprint arXiv:2210.08625*, 2022

Ian Gleason, Dong Gyu Lim, and Yujie Xu. The connected components of affine Deligne–Lusztig varieties. *arXiv preprint arXiv:2208.07195*, 2022

Johannes Anschütz, Ian Gleason, João Lourenço, and Timo Richarz. On the p-adic theory of local models. *arXiv preprint arXiv:2201.01234*, 2022

Ian Gleason. On the geometric connected components of moduli spaces of p-adic shtukas and local Shimura varieties. *arXiv preprint arXiv:2107.03579*, 2021

Ian Gleason. Specialization maps for Scholze's category of diamonds. *arXiv preprint arXiv:2012.05483*, 2021

Publications

Ian Gleason and João Lourenço. Tubular neighborhoods of local models. *To appear in Duke Math J.*

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

Ian Gleason and Isabel Hubard. The antiprism of an abstract polytope. *ARS MATHEMATICA CONTEMPORANEA*, 2021

Teaching

Teaching Assistant at UC Berkeley, Berkeley, CA.

MATH 110 (Linear Algebra for STEM). 3 sections, 1 semester	2020
MATH 250A (Graduate Course on Abstract Algebra). 1 section 1 semester	2019
MATH 54 (Linear Algebra). 2 sections 1 semester	2017
MATH 54 (Linear Algebra). 2 sections 1 semester	2016
MATH 1B (Calculus). 2 sections 1 semester	2016
MATH 1A (Calculus). 2 sections 1 semester	2015

Teaching Assistant A at UNAM, Mexico City, Mexico.

Logic I. 2013

Awards and Scholarships

Kenneth Ribet & Lisa Goldberg Award in Algebra 2020-2021
Mathematics Department of UC Berkeley

UC-MEXUS CONACYT Doctoral Fellowship for Mexican students 2017-2021

Support Programme for Research Projects and Technological Innovation. 2014
DGAPA-UNAM

International Student Mobility Scholarship. 2013
UNAM- DGECI.

Scholarship for Science Olympiads. 2010 - 2012
Mexican Academy of Science.

Service

Reviewed an article for Annals of Mathematics.