

## 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.  
Average: 9.96/10 with honors  
Thesis title: “El antiprisma” (*The antiprism*)  
Supervisor: Isabel Hubard

Aug 2010-  
Nov 2014

Phd in Mathematics, UC Berkeley.  
Thesis title: “Specialization maps for Scholze’s category of diamonds.”  
Supervisor: Sug Woo Shin

Aug 2015-  
Aug 2021

## Currently

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

## Talks in Conferences

“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*.  
 Ixtapa Zihuatanejo, Mexico. May 2014

### 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. Mittagseminar 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*

## 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

Ian Gleason and João Lourenço. Tubular neighborhoods of local models. *arXiv preprint arXiv:2204.05526*, 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 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
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## 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
Support Programme for Research Projects and Technological Innovation. DGAPA-UNAM	2014
International Student Mobility Scholarship. UNAM- DGECI.	2013
Scholarship for Science Olympiads. Mexican Academy of Science.	2010 - 2012

### **Service**

Reviewed an article for Annals of Mathematics.