

## **CUNY Mathematics Seminars Bulletin - CUNY Ph.D. Program in Mathematics**

**----- Fall 2024 | Monday, October 28, 2024-----**

Seminars are listed below in chronological order and usually show information for the current week and the following week's seminars based on the information provided by the seminar organizer. Special events are listed at the end of the second week.

Seminars run when classes are in session.

Always check the seminar's website (if provided) or contact the seminar organizer for the most current information including updates and abstracts. Special Events, if any, are listed at the end.

If you would like to sign up or change your email address to receive the weekly Seminar Bulletin, please visit:

<https://gc.listserv.cuny.edu/Scripts/wa-gc.exe?SUBED1=MATHSEMINARGC&A=1>

All other matters related to the seminars should be sent to [mathseminars@gc.cuny.edu](mailto:mathseminars@gc.cuny.edu).

# MONDAY, October 28

## **Algebraic Geometry and Commutative Algebra Student Learning Seminar**

Website: <https://sites.google.com/view/cunyagcastudentseminar/home>

Meets: 12:30PM - 1:45PM, Room 4214.03

Speaker: Nathaniel Kingsbury

Title: p-adic Numbers and the Weil Conjectures III: Conclusion of the Proof

## **Graduate Forum in Probability Seminar**

Website: <https://probability.commonsgc.cuny.edu/graduate-forum-in-probability/>

Meets: 2:00PM –4:00PM, Room 9116

Speaker:

Title: NA

## **Student Research Seminar- Graduate Student Colloquium**

Website: <https://sites.google.com/site/gradcenterseminars/current-seminars/graduate-student-colloquium/2024-2025>

Meets: 4:15PM-6:15PM, Room 5417

Speaker: Adam Sheffer

Title: Distinct Distances Problems

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# TUESDAY, October 29

## Einstein Chair Seminar

Website: [Einstein Chair Mathematics Seminar | CUNY Graduate Center](#)

Meets: 1:30PM – 2:30PM, Room 6417

Speaker:

Title: NA

## Geometry and Topology Student Seminar

Website: <https://www.math.csi.cuny.edu/abhijit/studentseminar/>

Meets: 1:30PM – 2:30PM, Room 4214.03

Speaker: Susan Rutter (CUNY GC)

Title: NA

## Hyperbolic Geometry Seminar

Website: [Hyperbolic Geometry Seminar \(google.com\)](#)

Meets: 2:45PM- 3:45PM, Room 6495

Speaker:

Title: NA

Not meeting this week.

## GC Arithmetic Geometry Seminar

Website: <https://sites.google.com/view/gc-arithmetic-geometry/home>

Meets: 3:00PM – 4:00PM, Room 9116 and Zoom

Speaker: Karol Koziol

Title: A gentle introduction to the mod  $p$  Local Langlands Program

Contact organizer: [Krzysztof.Klosin@qc.cuny.edu](mailto:Krzysztof.Klosin@qc.cuny.edu) for meeting id

## CUNY Geometry and Topology Seminar

Website: [CUNY Geometry and Topology Seminar](#)

Meets: 4:15PM – 5:30PM, Room 6417

Speaker: Kasia Jankiewicz (UCSC and IAS)

Title: Topological complexity of graph braid groups

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## WEDNESDAY, October 30

**The New York City Category Theory Seminar**

Website: [Category Theory Seminar \(cuny.edu\)](https://categorytheoryseminar.cuny.edu)

Meets: 2:00PM NYC Time. NOTE SPECIAL TIME. ZOOM TALK.

Speaker: Bruno Gavranović, Symbolica AI

Title: Categorical Deep Learning: An Algebraic Theory of Architectures.

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# THURSDAY, October 31

## CUNY Number Theory Student Seminar

Website: <https://sites.google.com/view/cunyntss>

Meets: 12:15AM - 1:15PM, Hyflex (In Person & Online simultaneously) Room 4214.03

Speaker: Wuxuan Tan

Title: Modular Representation of  $p$ -adic Groups

Contact organizer: Ajmain Yamin [ayamin@gradcenter.cuny.edu](mailto:ayamin@gradcenter.cuny.edu) for meeting id

## Geometric Group Theory Reading Group Seminar

Website: [CUNY GGT Reading Group \(google.com\)](#)

Meets: 2:00PM - 4:00PM, Room 9116

Speaker: Weiyan Lin

Title: NA

## Surface Dynamics Student Seminar

Website: <https://sites.google.com/site/enriquepujalsgc/home/sds>

Meets: 2:00PM - 4:00PM, Room 6417

Speaker:

Title: NA

## New York Number Theory Seminar

Website: <https://www.theoryofnumbers.com/NewYorkNumberTheorySeminar/aNYNTS-2024-Fall.pdf>

Meets: 2:30PM – 4:00PM, Hyflex (In Person & Online simultaneously) Room 4419

Speaker: David Ross, University of Hawai'i

Title: Egyptian fractions on groups

## CUNY Geometric Analysis Seminar

Website: [CUNY Geometric Analysis Seminar](#)

Meets: 4:15PM-6:15PM, Hyflex (In Person & Online simultaneously) Room 6417

Speaker: Yangyang Li

Title: Existence and regularity of anisotropic minimal hypersurfaces

## New York Joint Columbia-CUNY-NYU Number Theory Seminar

Website: [Joint-NTS.html \(columbia.edu\)](#)

Tea: 5:00PM-5:30PM, NYU - Warren Weaver Hall Room 517

Meets: 5:30PM-6:30PM, NYU - Warren Weaver Hall Room 517

Speaker:

Title: NA

Not meeting this week.

## Nonlinear Analysis and PDEs seminar

Website: [Marcello LUCIA - Nonlinear Analysis Seminar \(cuny.edu\)](#)

Meets: 6:30PM-8:00PM, Hyflex (In Person & Online simultaneously) Room 6417

Speaker:

Title: NA

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# FRIDAY, November 1

## Learning Seminar in Analysis & PDEs

Website: [CUNY HA/PDE - Learning Seminar](#)

Meets: 10:00AM – 11:00AM, Room 9116

Speaker:

Title: Monotone convergence theorem/dominated convergence theorem/Fatou's lemma

## Topological K-Theory study group

Website: <https://yfei.page/seminars/k-theory/>

Meets: 10:30AM- 11:30AM, Room 4214.03

Speaker:

Title: NA

## Learning Seminar on Ergodic Theory and Dynamical Systems and Related Topics

Website: <https://tamara.ccny.cuny.edu/seminar.html>

Meets: 11:00AM- 12:00PM, Room 5417

Speaker: Mathew Grote, CUNY - Graduate Center, New York, NY

Title: NA

## Set Theory Seminar

Website: <https://nylogic.github.io/set-theory-seminar.html>

Meets: 11:00AM – 12:30PM, Hyflex (In Person & Online simultaneously), Room 3207

Speaker:

Title: NA

Email Victoria Gitman(vgitman@gmail.com) for meeting id.

Not meeting this week.

## Differential Geometry, Topology, and Special Structures

Website: [Differential Geometry, Topology, and Special Structures Seminar](#)

Meets: 11:45AM – 1:45PM, Room 4419

Speaker: Prof. Lucia Martin-Merchan (U. Waterloo)

Title: Compact holonomy  $G_2$  manifolds need not be formal

## POLYNOMIAL AND MATRIX COMPUTATIONS

Website: <https://sites.google.com/view/polynomials-matrices-comp/home>

Meets: 11:50AM – 1:20PM, Room 5382

Speaker:

Title: NA

## New York Combinatorics Seminar

Website: [Seminar \(nycombinatorics.org\)](#)

Meets: 12:00PM – 1:30PM, Room 9116

Speaker:

Title: NA

Not meeting this week.

## Complex Analysis and Dynamics Seminar

Website: [Complex Analysis and Dynamics Seminar at CUNY's GC](#)

Meets: 1:45PM - 2:45PM, Room 5417

Speaker: Sahana Vasudevan (Institute for Advanced Study and Princeton University)

Title: Triangulated surfaces in moduli space

# FRIDAY, November 1 (continued)

## CUNY Logic Workshop

Website: <https://nylogic.github.io/logic-workshop.html>

Meets: 2:00PM - 3:45PM, Room 4419

Speaker:

Title: NA

Not meeting this week.

## Harmonic Analysis and PDE seminar

Website: <https://sites.google.com/view/cuny-hapde/home>

Meets: 2:00PM – 4:00PM, Room 9116

Speaker: Maja Taskovic (Emory University)

Title: NA

## Ergodic Theory and Dynamical Systems

Website: <https://tamara.ccny.cuny.edu/seminar.html>

Meets: 3:00PM – 4:00PM, Room 5417

Speaker: Sergiy Merenkov, CUNY - City College, New York, NY

Title: No bounded geometry wandering domains for  $C^1$ -surface diffeomorphisms

## Commutative Algebra and Algebraic Geometry Seminar

Website: <https://openlab.citytech.cuny.edu/caag/>

Meets: 4:00PM - 5:00PM, On Zoom this week.

Speaker: Shiji Lyu, University of Illinois at Chicago

Title: Approximation of schemes over complete local rings

Check website for Zoom information.

## NY Group Theory Seminar

Website: <https://sites.google.com/site/nygrouptheory/fall-2024>

Meets: 4:15PM- 6:15PM, Room 5417

Speaker: Benjamin Steinberg (Graduate Center & City College of CUNY)

Title: The homology of groupoids and groups associated to self-similar groups

## BEAG Seminar (Beginners Explorations in Algebraic Geometry)

Website: [https://lagcc-cuny.digication.com/beag/FALL\\_2024](https://lagcc-cuny.digication.com/beag/FALL_2024)

Meets: 5:30PM- 6:30PM

Speaker: Malgorzata Marciniak

Title: "Cluster Algebras"

Online only Contact: Hans Schoutens [HSchoutens@CityTech.Cuny.Edu](mailto:HSchoutens@CityTech.Cuny.Edu) or Malgorzata Marciniak

<mmarciniak@lagcc.cuny.edu

# MONDAY, November 4

## **Algebraic Geometry and Commutative Algebra Student Learning Seminar**

Website: <https://sites.google.com/view/cunyagcastudentseminar/home>

Meets: 12:30PM - 1:45PM, Room 4214.03

Speaker: Connor Stewart

Title: NA

## **Graduate Forum in Probability Seminar**

Website: <https://probability.commonsgc.cuny.edu/graduate-forum-in-probability/>

Meets: 2:00PM –4:00PM, Room 9116

Speaker:

Title: NA

## **Student Research Seminar- Graduate Student Colloquium**

Website: <https://sites.google.com/site/gradcenterseminars/current-seminars/graduate-student-colloquium/2024-2025>

Meets: 4:15PM-6:15PM, Room 5417

Speaker: Krzysztof Klosin

Title: NA



# TUESDAY, November 5 (Election Day)

## Einstein Chair Seminar

Website: [Einstein Chair Mathematics Seminar | CUNY Graduate Center](#)

Meets: 1:30PM – 2:30PM, Room 6417

Speaker:

Title: NA

## Geometry and Topology Student Seminar

Website: <https://www.math.csi.cuny.edu/abhijit/studentseminar/>

Meets: 1:30PM – 2:30PM, Room 4214.03

Speaker:

Title: NA

## Hyperbolic Geometry Seminar

Website: [Hyperbolic Geometry Seminar \(google.com\)](#)

Meets: 2:45PM- 3:45PM, Room 6495

Speaker: Ken Bromberg (U. of Utah)

Title: NA

## GC Arithmetic Geometry Seminar

Website: <https://sites.google.com/view/gc-arithmetic-geometry/home>

Meets: 3:00PM – 4:00PM, Room 9116 and Zoom

Speaker: Deewang Bhamidipati

Title:  $q$ -Frobenius Trace Distributions of Abelian Varieties

Contact organizer: [Krzysztof.Klosin@qc.cuny.edu](mailto:Krzysztof.Klosin@qc.cuny.edu) for meeting id

## CUNY Geometry and Topology Seminar

Website: [CUNY Geometry and Topology Seminar](#)

Meets: 4:15PM – 5:30PM, Room 6417

Speaker:

Title: NA

Not meeting this week.

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## WEDNESDAY, November 6

### The New York City Category Theory Seminar

Website: [Category Theory Seminar \(cuny.edu\)](http://categorytheoryseminar.cuny.edu)

Meets: ZOOM TALK. TIME TBA

Speaker: David Jaz Myers, Topos Research UK.

Title: Contextads: Para and Kleisli constructions as wreath products.

Contact N Yanofsky [noson@sci.brooklyn.cuny.edu](mailto:noson@sci.brooklyn.cuny.edu) for zoom link

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# THURSDAY, November 7

## CUNY Number Theory Student Seminar

Website: <https://sites.google.com/view/cunyntss>

Meets: 12:15AM - 1:15PM, Hyflex (In Person & Online simultaneously) Room 4214.03

Speaker: Valeriy Sergeev

Title: NA

Contact organizer: Ajmain Yamin [ayamin@gradcenter.cuny.edu](mailto:ayamin@gradcenter.cuny.edu) for meeting id

## Geometric Group Theory Reading Group Seminar

Website: [CUNY GGT Reading Group \(google.com\)](#)

Meets: 2:00PM - 4:00PM, Room 9116

Speaker: Zhihao Mu

Title: Splittings of hyperbolic groups over two-ended groups

## Surface Dynamics Student Seminar

Website: <https://sites.google.com/site/enriquepujalsgc/home/sds>

Meets: 2:00PM - 4:00PM, Room 6417

Speaker:

Title: NA

## New York Number Theory Seminar

Website: <https://www.theoryofnumbers.com/NewYorkNumberTheorySeminar/aNYNTS-2024-Fall.pdf>

Meets: 2:30PM – 4:00PM, Hyflex (In Person & Online simultaneously) Room 4419

Speaker: Jonathan M. Keith, Monash University, Australia

Title: The pseudometric topology induced by upper asymptotic density

## CUNY Geometric Analysis Seminar

Website: [CUNY Geometric Analysis Seminar](#)

Meets: 4:15PM-6:15PM, Hyflex (In Person & Online simultaneously) Room 6417

Speaker: Alberto Rodriguez Vazquez

Title: Positive Ric<sup>2</sup> curvature on products of spheres and their quotients via intermediate fatness

## New York Joint Columbia-CUNY-NYU Number Theory Seminar

Website: [Joint-NTS.html \(columbia.edu\)](#)

Tea: 5:00PM-5:30PM, Room 4102

Meets: 5:30PM-6:30PM, Room 4102

Speaker: Katherine Woo, Princeton University

Title: Manin's Conjecture for Châtelet Surfaces

## Nonlinear Analysis and PDEs seminar

Website: [Marcello LUCIA - Nonlinear Analysis Seminar \(cuny.edu\)](#)

Meets: 6:30PM-8:00PM, Hyflex (In Person & Online simultaneously) Room 6417

Speaker:

Title: NA

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# FRIDAY, November 8

## Learning Seminar in Analysis & PDEs

Website: [CUNY HA/PDE - Learning Seminar](#)

Meets: 10:00AM – 11:00AM, Room 9116

Speaker:

Title: van der Corput's lemma/Riemann-Lebesgue lemma/stationary phase

## Topological K-Theory study group

Website: <https://yfei.page/seminars/k-theory/>

Meets: 10:30AM- 11:30AM, Room 4214.03

Speaker:

Title: NA

## Learning Seminar on Ergodic Theory and Dynamical Systems and Related Topics

Website: <https://tamara.ccnycuny.edu/seminar.html>

Meets: 11:00AM- 12:00PM, Room 5417

Speaker: Yushan Jiang, CUNY - Graduate Center, New York, NY

Title: NA

## Set Theory Seminar

Website: <https://nylogic.github.io/set-theory-seminar.html>

Meets: 11:00AM – 12:30PM, Hyflex (In Person & Online simultaneously), Room 3207

Speaker: Geoff Galgon

Title: Distributivity and Base trees for  $P(\kappa)/<\kappa$

Email Victoria Gitman(vgitman@gmail.com) for meeting id.

## Differential Geometry, Topology, and Special Structures

Website: [Differential Geometry, Topology, and Special Structures Seminar](#)

Meets: 11:45AM – 1:45PM, Room 4419

Speaker:

Title: NA

## POLYNOMIAL AND MATRIX COMPUTATIONS

Website: <https://sites.google.com/view/polynomials-matrices-comp/home>

Meets: 11:50AM – 1:20PM, Room 5382

Speaker:

Title: NA

## New York Combinatorics Seminar

Website: [Seminar \(nycombinatorics.org\)](https://nycombinatorics.org)

Meets: 12:00PM – 1:30PM, Room 9116

Speaker:

Title:

Not meeting today due to [Graph Theory Day of New York](#) at the Graduate Center

## Complex Analysis and Dynamics Seminar

Website: [Complex Analysis and Dynamics Seminar at CUNY's GC](#)

Meets: 1:45PM - 2:45PM, Room 5417

Speaker: Sayantika Mondal (The Graduate Center)

Title: NA

# FRIDAY, November 8 (continued)

## CUNY Logic Workshop

Website: <https://nylogic.github.io/logic-workshop.html>

Meets: 2:00PM - 3:45PM, Room 4419

Speaker: Artem Chernikov University of Maryland

Title: NA

## Harmonic Analysis and PDE seminar

Website: <https://sites.google.com/view/cuny-hapde/home>

Meets: 2:00PM – 4:00PM, Room 9116

Speaker: James Murphy (Tufts)

Title: NA

## Ergodic Theory and Dynamical Systems

Website: <https://tamara.ccny.cuny.edu/seminar.html>

Meets: 3:00PM – 4:00PM, Room 5417

Speaker: Melkana Brakalova, Fordham University, NY

Title: When the circular dilatation of a quasiconformal mapping at a point equals one.

## Commutative Algebra and Algebraic Geometry Seminar

Website: <https://openlab.citytech.cuny.edu/caag/>

Meets: 4:00PM - 5:00PM, Room 4214.03

Speaker:

Title: NA

Not meeting this week.

## NY Group Theory Seminar

Website: <https://sites.google.com/site/nygrouptheory/fall-2024>

Meets: 4:15PM- 6:15PM, Room 5417

Speaker: Alexei G Miasnikov (Stevens Institute of Technology)

Title: NA

## BEAG Seminar (Beginners Explorations in Algebraic Geometry)

Website: [https://lagcc-cuny.digication.com/beag/FALL\\_2024](https://lagcc-cuny.digication.com/beag/FALL_2024)

Meets: 5:30PM- 6:30PM

Speaker:

Title: NA

Online only Contact: Hans Schoutens [HSchoutens@CityTech.Cuny.Edu](mailto:HSchoutens@CityTech.Cuny.Edu) or Malgorzata Marciniak

<mmarciniak@lagcc.cuny.edu

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## Upcoming Special Events

### [Fri Nov 8: 80th Graph Theory Day of New York](#)

Location: Graduate Center, 4th Floor Science Room,

Keynote Speakers: Josh Hiller (Adelphi University) and Jinyoung Park (New York University)

Please encourage your students to present posters in the poster session.

### [Tuesday Nov 12: MathFest](#)

Location: Hyflex (zoom & in person at the Graduate Center, Math Lounge (room 4214)

Time: 10am-2:30pm EST