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

Fall 202	24   Monday	. November 4	. 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: <a href="https://gc.listserv.cuny.edu/Scripts/wa-gc.exe?SUBED1=MATHSEMINARGC&A=1">https://gc.listserv.cuny.edu/Scripts/wa-gc.exe?SUBED1=MATHSEMINARGC&A=1</a>

All other matters related to the seminars should be sent to mathseminars@gc.cuny.edu.

## **MONDAY**, November 4

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

Website: <a href="https://sites.google.com/view/cunyagcastudentseminar/home">https://sites.google.com/view/cunyagcastudentseminar/home</a>

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

Speaker: Connor Stewart

Title: Models of Curves and Mac Lane Valuations via Examples

### **Graduate Forum in Probability Seminar**

Website: <a href="https://probability.commons.gc.cuny.edu/graduate-forum-in-probability/">https://probability.commons.gc.cuny.edu/graduate-forum-in-probability/</a>

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: Introduction To Modularity Theorems in Number Theory

## **TUESDAY, November 5 (Election Day)**

#### **Einstein Chair Seminar**

Website: Einstein Chair Mathematics Seminar | CUNY Graduate Center

Meets: 1:30PM -2:30PM, Room 6417

Speaker: Ryan Utke

Title: String Topology for Mappings of Surfaces

### **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: <u>Hyperbolic Geometry Seminar (google.com)</u>

Meets: 2:45PM- 3:45PM, Room 6495 Speaker: Ken Bromberg (U. of Utah) Title: Disintegrating The Curve Graph

### **GC Arithmetic Geometry Seminar**

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

Meets: 3:00PM – 4:00PM, Hyflex (In Person & Online simultaneously) Room 9116

Speaker: Deewang Bhamidipati

Title: q-Frobenius Trace Distributions of Abelian Varieties

Contact organizer: 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) Meets: 2:00PM-3:30PM. Online Only this week Speaker: David Jaz Myers, NYU Abu Dhabi

Title: Contextads: Para and Kleisli constructions as wreath products. Contact N Yanofsky 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: Elliptic Curves and F-singularities

Contact organizer: Ajmain Yamin 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 Ric2 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: <u>CUNY HA/PDE - Learning Seminar</u> 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: <a href="https://yfei.page/seminars/k-theory/">https://yfei.page/seminars/k-theory/</a> Meets: 10:30AM- 11:30AM, Room 4214.03

Speaker: David Pham (QCC)

Title: Definition and Properties of Characteristic Classes - I

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

Title: NA

### **Set Theory Seminar**

Website: <a href="https://nylogic.github.io/set-theory-seminar.html">https://nylogic.github.io/set-theory-seminar.html</a>

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: Prof. Scott Wilson (CUNY) Title: HKT Balanced Manifolds

### **POLYNOMIAL AND MATRIX COMPUTATIONS**

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

Meets: 11:50AM - 1:20PM, Room 5382

Speaker: Title: NA

### **New York Combinatorics Seminar**

Website: <u>Seminar (nycombinatorics.org)</u> Meets: 12:00PM – 1:00PM, 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: Distinguishing Filling Curve Types via Special Metrics

## FRIDAY, November 8 (continued)

### **CUNY Logic Workshop**

Website: <a href="https://nylogic.github.io/logic-workshop.html">https://nylogic.github.io/logic-workshop.html</a>

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

Speaker: Artem Chernikov, University of Maryland

Title: External Definability

### **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: Intrinsic Models in Wasserstein Space with Applications to Signal and Image Processing

### **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: <a href="https://sites.google.com/site/nygrouptheory/fall-2024">https://sites.google.com/site/nygrouptheory/fall-2024</a>

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

Speaker: Alexei G Miasnikov (Stevens Institute of Technology)

Title: On QFA Property of Restricted Wreath Products of Free Abelian Groups and Their Central Extensions

### **BEAG Seminar (Beginners Explorations in Algebraic Geometry)**

Website: https://lagcc-cuny.digication.com/beag/FALL 2024

Meets: 5:50 PM- 6:30PM, Online only Speaker: Malgorzata Marciniak

Title: Cluster Algebras

Online only Contact: Hans Schoutens <u>HSchoutens@CityTech.Cuny.Edu</u> or Malgorzata Marciniak

<mmarciniak@lagcc.cuny.edu

# **MONDAY, November 11**

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

Website: <a href="https://sites.google.com/view/cunyagcastudentseminar/home">https://sites.google.com/view/cunyagcastudentseminar/home</a>

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

Speaker: Title: NA

Not meeting this week.

### **Graduate Forum in Probability Seminar**

Website: https://probability.commons.gc.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: Victor Pan

Title: NA

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## **TUESDAY, November 12**

### **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: <u>Hyperbolic Geometry Seminar (google.com)</u>

Meets: 2:45PM- 3:45PM, Room 6495 Speaker: Matt Stover (Temple University)

Title:

### **GC Arithmetic Geometry Seminar**

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

Meets: 3:00PM - 4:00PM, , Hyflex (In Person & Online simultaneously) Room 9116

Speaker: Title: NA

Not meeting this week.

Contact organizer: 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: Paige Hillen (UCSB)

Title: Lattices of Large Systole Containing a Fixed 3-Manifold Group

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# **WEDNESDAY, November 13**

The New York City Category Theory Seminar Website: Category Theory Seminar (cuny.edu)

Meets: 7:00PM - 8:30PM, Room 6417 Speaker: Emilio Minichiello, CUNY CityTech

Title: Decision Problems on Graphs with Sheaves

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### **THURSDAY, November 14**

### **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: Ajith Nair

Title: NA

Contact organizer: Ajmain Yamin 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: Shaivi Chavan

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: Senia Sheydvasser, Bates College

Title: Distribution of Ulam words

### **CUNY Geometric Analysis Seminar**

Website: CUNY Geometric Analysis Seminar

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

Speaker1 (4:15-5:15PM): Chao Li

Title1: NA

Speaker2 (5:30-6:15PM): Marcello Lucia

Title2: NA

#### **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: Manish Patnaik, University of Alberta, Canada

Title: NA

### **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 15**

### **Learning Seminar in Analysis & PDEs**

Website: <u>CUNY HA/PDE - Learning Seminar</u> Meets: 10:00AM – 11:00AM, Room 9116

Speaker:

Title: Sobolev spaces/the L infinity Sobolev inequality

### Topological K-Theory study group

Website: <a href="https://yfei.page/seminars/k-theory/">https://yfei.page/seminars/k-theory/</a> Meets: 10:30AM- 11:30AM, Room 4214.03

Speaker: David Pham (QCC)

Title: Definition and Properties of Characteristic Classes - II

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

Website: https://tamara.ccnv.cunv.edu/seminar.html

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

Speaker: Yuri Lima, Universidade Federal do Ceará, Brasil

Title: Measures Of Maximal Entropy for Non-Uniformly Hyperbolic Maps

### **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: Philipp Schlicht, Kurt Gödel Research Center

Title: NA

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: Prof. Guangbo Xu (Rutgers U.)

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)
Meets: 12:00PM – 1:30PM, Room 9116
Speaker: Marie Kramer (Syracuse University)
Title: Graph Embeddings & Torus Obstructions

### **Complex Analysis and Dynamics Seminar**

Website: Complex Analysis and Dynamics Seminar at CUNY's GC

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

Speaker: Xinlong Dong (Kingsborough Community College)
Title: Divergent Geodesics in The Universal Teichmüller Space

## FRIDAY, November 15 (continued)

### **CUNY Logic Workshop**

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

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

Speaker: Russell Miller, CUNY

Title: Computable Reductions on Groups and Fields

### Harmonic Analysis and PDE seminar

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

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

Speaker: Jackie Lok (Princeton)

Title: NA

### **Ergodic Theory and Dynamical Systems**

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

Meets: 3:00PM - 4:00PM, Room 5417

Speaker: Yuri Lima, Universidade Federal do Ceará, Brasil

Title: Measures Of Maximal Entropy for Non-Uniformly Hyperbolic Maps

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

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

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

Speaker: Ben Blum-Smith, NYU Center for Data Science

Title: NA

### **NY Group Theory Seminar**

Website: <a href="https://sites.google.com/site/nygrouptheory/fall-2024">https://sites.google.com/site/nygrouptheory/fall-2024</a>

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

Speaker: Paige Hillen (UCSB)

Title: Latent Symmetry of Graphs and Stretch Factors in Out(F\_n)

### **BEAG Seminar (Beginners Explorations in Algebraic Geometry)**

Website: https://lagcc-cuny.digication.com/beag/FALL 2024

Meets: 5:50 PM- 6:30PM, Online only

Speaker: Title: NA

Online only Contact: Hans Schoutens HSchoutens@CityTech.Cuny.Edu or Malgorzata Marciniak

<mmarciniak@lagcc.cuny.edu

Not meeting this week.

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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