

**CUNY Mathematics Seminars Bulletin - CUNY Ph.D. Program in Mathematics**  
----- Fall 2019 | Tuesday, September 3<sup>rd</sup>, 2019 -----

Unless otherwise noted, all seminars meet at the CUNY Graduate Center, located at 365 Fifth Ave. (at 34th St.), NYC. Seminars are listed below in chronological order, and show dates for the upcoming two weeks. Special Events, if any, are listed at the end. A seminar's website, if available, may contain abstracts of the talks plus additional information. Note: A pdf version of this bulletin is attached in case the formatting of the text below is thrown off on your screen. Matters related to the seminars should be sent to [mathseminars@gc.cuny.edu](mailto:mathseminars@gc.cuny.edu)

**MONDAY, September 2nd**

**Labor Day Graduate Center is closed.**

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**TUESDAY, September 3rd**

**Working Group on Probabilistic Number Theory**

Meets: 9:30AM – 11:30AM, Rm. 4214.03

Speaker:

Title: NA

**Geometry & Topology Student Seminar**

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

Meets: 2:00PM – 3:00PM, Rm. 4214.03

Speaker:

Title: NA

**Hyperbolic Geometry Seminar**

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

Meets: 3:00PM - 4:00PM, Rm. 4214.03

Speaker:

Title: NA

**CUNY Geometry & Topology Seminar**

Website: <http://comet.lehman.cuny.edu/behrstock/seminar/>

Meets: 4:15PM - 5:15PM, Rm. 6417

Speaker: Santiago Simanca, NYU

Title: The intrinsic and extrinsic geometry of submanifolds of a Riemannian manifold

**CUNY Probability Seminar**

Website: <https://probability.commonsgc.cuny.edu/>

Meets: 4:15PM – 5:30PM, Rm. 5417

Speaker: Nicola Kistler, Frankfurt

Title: From Parisi to Boltzmann

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## WEDNESDAY, September 4<sup>th</sup>

### **Topology, Geometry and Physics Seminar I**

Website: <https://www.zeinalian.com/seminar/>

Meets: 10:00AM – 11:30AM, Rm. 6417

Speaker: Raymond Puzio

Title: Introduction to Quantum Field Theory and Costello's Programme

### **Topology, Geometry and Physics Seminar II**

Website: <https://www.zeinalian.com/seminar/>

Meets: 12:00PM – 1:30PM, Rm. 6417

Speaker: Collective Participation

Title: Working with students on some fundamental concepts

### **Topology, Geometry and Physics Seminar III**

Website: <https://www.zeinalian.com/seminar/>

Meets: 2:00PM – 4:00PM, Rm. 6417

Speaker: Mahmoud Zeinalian

Title: An introductory discussion about smooth and holomorphic vector bundles and their characteristic classes

### **Algebraic and Numerical Computation**

Meets: 2:00PM – 6:15PM, Rm. 3307

Speaker:

Title: NA

### **Algebraic Topology Seminar**

Website:

Meets: 4:30PM - 5:30PM, Rm. 4214.03

Speaker:

Title: NA

### **Models of Peano Arithmetic**

Website: <https://nylogic.github.io/MOPA.html>

Meets: 6:30PM - 8:30PM, Rm. 4214.03

Speaker:

Title: NA

### **NYC Category Theory Seminar**

Website: <http://www.sci.brooklyn.cuny.edu/~noson/CTseminar.html>

Meets: 7:00PM - 8:30PM, Rm. 6417

Speaker:

Title: NA

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## THURSDAY, September 5<sup>th</sup> (Classes and Seminars follow Monday schedule.)

### **Student Dynamics Seminar**

Meets: 12:00PM – 1:30PM, Rm. 5417

Speaker:

Title: NA

### **Einstein Chair Seminar**

Website:

<http://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Doctoral-Programs/Mathematics/Seminars/Einstein-Chair-Mathematics-Seminar>

Meets: 2:00PM – 6:15PM, Rm. 6417

Speaker:

Title: NA

### **Algebraic Number Theory Student Seminar**

Website: <https://sites.google.com/view/cuny-alg-nt-student-seminar>

Meets: 2:00PM – 4:00PM, Rm. 4214.03

Speaker:

Title: NA

### **Graduate Student Colloquium**

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

Meets: 4:15pm- 6:15pm, Rm. 5417

Title: NA

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## **FRIDAY, September 6<sup>th</sup>**

### **Number Theory Student Seminar**

Meets: 10:00AM – 11:30M, Rm. 4419

Speaker: Mel Nathanson

Title: The max-flow min-cut theorem for integers and matchings in bipartite graphs

### **Set Theory Seminar**

Website: <https://nylogic.github.io/nylogic.github.io>

Meets: 10:00AM - 12:00PM, Rm. 6417

Speaker: Russell Miller, CUNY

Title: A computability-theoretic proof of Lusin's Theorem

### **Kolchin Seminar in Differential Algebra**

Website: <http://qcpages.gc.cuny.edu/~aovchinnikov/ksda/>

Meets: 10:15AM – 11:30AM, Rm. 5382

Speaker:

Title: NA

### **Extremal Length Seminar**

Website: <http://userhome.brooklyn.cuny.edu/gardiner/notes.html>

Meets: 10:30AM - 12:00PM, Rm. 4214.03

Speaker:

Title: NA

### **Almost Complex Geometry**

Website: <http://qcpages.gc.cuny.edu/~swilson/ACGsem.html>

Meets: 11:45AM – 1:45PM, Rm. 3212

Speaker: Scott Wilson

Title: Harmonic symmetries for Hermitian manifolds

**New York Combinatorics Seminar**

Website: <http://userhome.brooklyn.cuny.edu/skingan/CombinatoricsSeminar/>

Meets: 11:45AM - 12:45PM, Rm. 4422

Speaker:

Title: NA

**Study Group in Number Theory**

Website: [http://fsw01.bcc.cuny.edu/cormac.osullivan/Research/number\\_theory.html](http://fsw01.bcc.cuny.edu/cormac.osullivan/Research/number_theory.html)

Meets: 11:45PM - 1:45PM, Rm. 3307

Speaker:

Title: NA

**Data Science and Applied Topology**

Website: <http://cunygc.appliedtopology.nyc/>

Meets: 11:45AM - 1:45PM, Rm. 3209

Speaker: Mikael Vejdemo-Johansson

Title: Semester introduction

**CUNY Representation Theory Seminar**

Website: <https://sites.google.com/site/cunyrts/>

Meets: 12:00PM - 1:45PM, Rm. 3307

Speaker: Robert Donley

Title: Clebsch-Gordan coefficients: partitions of semi-magic squares of size three

**Model Theory Seminar**

Website: <http://nylogic.org/model-theory>

Meets: 12:30PM - 1:45PM, Rm. 6417

Speaker:

Title: NA

**BEAG seminar (Beginners Explorations in Algebraic Geometry)**

Website: [https://lagcc-cuny.digication.com/beag/SPRING\\_2019](https://lagcc-cuny.digication.com/beag/SPRING_2019)

Meets: 3:00PM - 4:00PM, Rm. 4433

Speaker:

Title: NA

**Complex Analysis and Dynamics Seminar**

Website: <http://qcpages.qc.cuny.edu/~zakeri/seminar.html>

Meets: 2:00PM - 3:30PM, Rm. 3212

Speaker:

Title: NA

**CUNY Logic Workshop**

Website: <https://nylogic.github.io/nylogic.github.io/>

Meets: 2:00PM - 3:30PM, Rm. 6417

Speaker: Russell Miller, CUNY

Title: A computability-theoretic proof of Lusin's Theorem

**Discrete Geometry Seminar**

Website: <https://geometrynyc.wixsite.com/home/nyc-geometry-seminar>

Meets: 2:00PM - 4:00PM, Rm. 5383

Speaker:

Title: NA

**Kolchin Afternoon Seminar in Differential Algebra**

Website: <http://qcpages.qc.cuny.edu/~aovchinnikov/ksda/>

Meets: 2:00PM – 4:00PM, Rm. 5382

Speaker:

Title: NA

**Harmonic Analysis and PDE's Seminar**

Website: <https://sites.google.com/site/mathphysseminar/>

Meets: 2:00PM – 4:00PM, Rm. 4419

Speaker: Mariusz Mirek, Rutgers University

Title: Dimension free estimates for the discrete Hardy- Littlewood maximal functions

**Collaborative Number Theory Seminar**

Website: <http://qcpages.qc.cuny.edu/~msabitova/CNTS.html>

Meets: 2:00PM – 3:30PM, Rm. 3310A

Speaker: Catherine Hsu, Bristol University

Title: Eisenstein congruences and an explicit non-Gorenstein  $R=T$

**Algebra and Cryptography Seminar**

Website: <http://shpilrain.ccnycuny.edu/algcryp.html>

Meets: 2:30PM- 4:30PM, Rm. 3307

Speaker:

Title: NA

**NY Group Theory Seminar**

Website: <https://sites.google.com/site/nygrouptheory/new-york-group-theory-seminar/fall-2019>

Meets: 4:00PM – 5:30PM, Rm. 5417

Speaker:

Title: NA

**Learning Seminar: Introduction to modular forms**

Meets: 4:45PM – 5:45PM, Rm. 5382

Speaker: Kris Klosin

Title: Modular forms - definitions and basic properties

**Commutative Algebra & Algebraic Geometry Seminar**

Website: <http://websupport1.citytech.cuny.edu/Faculty/hschoutens/CAAG.html>

Meets: 4:15PM – 5:15PM, Rm. 6417

Speaker: Bart Van Steirteghem, FAU Erlangen- Nurnberg and CUNY

Title: Momentum polytopes of projective spherical varieties

**Logic, Games and Language Seminar**

Meets: 4:15PM – 6:15PM, Rm. 4421

Speaker:

Title: NA

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**MONDAY, September 9<sup>th</sup>**

**Student Dynamics Seminar**

Meets: 12:00PM – 1:30PM, Rm. 5417

Speaker:

Title: NA

### **Algebraic Number Theory**

Website: <https://sites.google.com/site/gradcenterseminars/current-seminars/algebraic-number-theory-student-seminar>

Meets: 2:00PM – 4:00PM, Rm. 4214.03

Speaker:

Title: NA

### **Einstein Chair Seminar**

Website:

<http://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Doctoral-Programs/Mathematics/Seminars/Einstein-Chair-Mathematics-Seminar>

Meets: 2:00PM – 6:15PM, Rm. 6417

Speaker:

Title: NA

### **Graduate Student Colloquium**

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

Meets: 4:15pm- 6:15pm, Rm. 5417

Speaker: Ara Basmajian

Title: NA

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## **TUESDAY, September 10<sup>TH</sup>**

### **Working Group on probabilistic Number Theory**

Meets: 9:30AM – 11:30AM, Rm. 4241.03

Speaker:

Title: NA

### **Geometry & Topology Student Seminar**

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

Meets: 2:00PM – 3:00PM, Rm. 4214.03

Speaker: Abhijit Champanerkar

Title: Torihedral decompositions of link complements in the thickened torus

### **Hyperbolic Geometry Seminar**

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

Meets: 3:00PM - 4:00PM, Rm. 4214.03

Speaker: Edgar Bering, Temple University

Title: Special covers of alternating links

### **CUNY Geometry & Topology Seminar**

Website: <http://comet.lehman.cuny.edu/behrstock/seminar/>

Meets: 4:15PM - 5:15PM, Rm. 6417

Speaker: Heejoung Kim, UIUC

Title: Algorithms detecting stability and Morseness for finitely generated groups

### **CUNY Probability Seminar**

Website: <https://probability.commonscs.gc.cuny.edu/>

Meets: 4:15PM – 5:30PM, Rm. 5417

Speaker: Guillaume Dubach, CUNY

Title: Words of non-Hermitian random matrices

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**WEDNESDAY, September 11<sup>th</sup>**

**Topology, Geometry and Physics I**

Website: <https://www.zeinalian.com/seminar/>

Meets: 10:00AM - 11:30AM, Rm. 6417

Speaker: Raymond Puzio

Title: Introduction to Quantum Field Theory and Costello's Programme

**Topology, Geometry and Physics II**

Website: <https://www.zeinalian.com/seminar>

Meets: 12:00PM - 1:30PM, Rm. 6417

Speaker:

Title: NA

**Topology, Geometry and Physics III**

Website: <https://www.zeinalian.com/seminar>

Meets: 2:00PM - 4:00PM, Rm. 6417

Speaker: Martin Bendersky

Title: The Bousfield Kan completion

**Algebraic & Numerical Computation**

Meets: 2:00PM - 6:15PM, Rm. 3307

Speaker:

Title: NA

**Algebraic Topology Seminar**

Website: <http://math.hunter.cuny.edu/mbenders/seminar.html>

Meets: 4:30PM - 5:30PM, Rm. 4214.03

Speaker:

Title: NA

**Models of Peano Arithmetic**

Website: <https://nylogic.github.io/MOPA.html>

Meets: 6:30PM - 8:30PM, Rm. 4214.03

Speaker:

Title: NA

**NYC Category Theory Seminar**

Website: <http://www.sci.brooklyn.cuny.edu/~noson/CTseminar.html>

Meets: 7:00PM - 8:30PM, Rm. 6417

Speaker:

Title: NA

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**THURSDAY, September 12<sup>th</sup>**

**Symbolic-Numeric Computing Seminar**

Website: <http://qcpages.qc.cuny.edu/~aovchinnikov/seminar.html>

Meets: 2:00PM - 4:00PM, Rm. 6496

Speaker:

Title: NA

**New York Number Theory Seminar**

Website: <http://www.math.rutgers.edu/~bumby/nyntsem/>

Meets: 2:45PM - 4:00PM, Rm. 4419

Speaker:

Title: NA

**CUNY Geometric Analysis Seminar**

Website: <https://bsantoro.cuny.cuny.edu/GCSeminar.html>

Meets: 3:00PM - 4:00PM, Rm. 3212

Speaker: Markus Upmeyer, University of Oxford

Title: Spin structures and orientation data for CY3

**Nonlinear Analysis and PDEs Seminar**

Website:

<https://www.math.csi.cuny.edu/~mlucia/GCactivities.html>

Meets: 4:15PM - 5:15PM, Rm. 6496

Speaker:

Title: NA

**Research Training Group in Number Theory Seminar**

Website: <http://www.math.columbia.edu/~goldfeld/ScheduleJointNTS33.html>

Meets: 4:00PM - 5:00PM, Rm. 4102

Speaker:

Title: NA

Tea: 5:00PM - 5:30PM in Rm. 4102

NOTE: The RTG talk is aimed at graduate students and post-docs.

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

Website: <http://www.math.columbia.edu/~goldfeld/ScheduleJointNTS33.html>

Meets: 5:30PM - 7:00PM, Rm. 4102

Speaker:

Title: NA

Tea: 5:00PM - 5:30PM in Rm. 4102

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**FRIDAY, September 13<sup>th</sup>**

**Number Theory Student Seminar**

Meets: 10:00AM - 11:30M, Rm. 4419

Speaker:

Title: NA

**Set Theory Seminar**

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

Meets: 10:00AM - 12:00PM, Rm. 6417

Speaker:

Title: NA

**Kolchin Seminar in Differential Algebra**

Website: <http://qcpages.qc.cuny.edu/~aovchinnikov/ksda/>

Meets: 10:00AM - 11:30AM, Rm. 5382

Speaker: Daniel Robertz, University of Plymouth

Title: Algorithmic Approach to Strong Consistency Analysis of Finite Difference Approximations to PDE Systems

**Extremal Length Seminar**

Website: <http://userhome.brooklyn.cuny.edu/gardiner/notes.html>

Meets: 10:30AM - 12:00PM, Rm. 4214.03

Speaker:

Title: NA

**Almost Complex Geometry**

Website: <http://qcpages.qc.cuny.edu/~swilson/ACGsem.html>

Meets: 11:45AM - 1:45PM, Rm. 3212

Speaker:

Title: NA

**New York Combinatorics Seminar**

Website: <http://userhome.brooklyn.cuny.edu/skingan/CombinatoricsSeminar/index.html>

Meets: 11:45AM - 12:45PM, Rm. 4422

Speaker:

Title: NA

**Study Group in Number Theory**

Meets: 11:45PM - 1:45PM, Rm. 5417

Speaker:

Title: NA

**Data Science and Applied Topology**

Website: <http://cunygc.appliedtopology.nyc/>

Meets: 11:45AM - 1:45PM, Rm. 3209

Speaker: Mikael Vejdemo-Johansson

Title: NA

**CUNY Representation Theory Seminar**

Website: <https://sites.google.com/site/cunyrts/>

Meets: 12:00PM - 1:45PM, Rm (Math 407 Columbia)

Speaker: Daniel Tubbenhauer, University of Zurich

Title: 2-representations of Soergel bimodules

(Joint with the Columbia Symplectic Geometry, Gauge Theory, and Categorification Seminar, 1pm Columbia Math 407)

**Model Theory Seminar**

Website: <http://nylogic.org/model-theory>

Meets: 12:30PM - 1:45PM, Rm. 6417

Speaker:

Title: NA

**BEAG seminar (Beginners Explorations in Algebraic Geometry)**

Website: [https://lagcc-cuny.digication.com/beag/FALL\\_2018](https://lagcc-cuny.digication.com/beag/FALL_2018)

Meets: 3:00PM - 4:00PM, Rm. 4433

Speaker:

Title: NA

**Complex Analysis and Dynamics Seminar**

Website: <http://qcpages.qc.cuny.edu/~zakeri/seminar.html>

Meets: 2:00PM - 3:30PM, Rm. 3212

Speaker:

Title: NA

### **CUNY Logic Workshop**

Website: [https://nylogic.github.io/\[nylogic.github.io](https://nylogic.github.io/[nylogic.github.io)

Meets: 2:00PM – 3:45PM, Rm. 6417

Speaker:

Title: NA

### **Discrete Geometry Seminar**

Website: <https://geometrynyc.wixsite.com/home/nyc-geometry-seminar>

Meets: 2:00PM – 4:00PM, Rm. 5383

Speaker:

Title: NA

### **Harmonic Analysis and PDE's Seminar**

Website: <https://sites.google.com/site/mathphysseminar/>

Meets: 2:00PM – 4:00PM, Rm. 4419

Speaker: Krystal Taylor, Ohio State University

Title: The Buffon-circle problem via a quantification of the Besicovitch projection theorem

### **Kolchin Afternoon Seminar in Differential Algebra**

Website: <http://qcpages.qc.cuny.edu/~aovchinnikov/ksda/>

Meets: 2:00PM – 4:00PM, Rm. 5382

Speaker:

Title: NA

### **Collaborative Number Theory Seminar**

Website: <http://qcpages.qc.cuny.edu/~msabitova/CNTS.html>

Meets: 2:00PM – 3:30PM, Rm. TBA

Speaker:

Title: NA

### **Algebra and Cryptography Seminar**

Website: <http://www.sci.ccny.cuny.edu/~shpil/algcryp.html>

Meets: 2:30PM – 4:30PM, Rm. 3307

Speaker:

Title: NA

### **NY Group Theory Seminar**

Website: <https://sites.google.com/site/nygrouptheory/new-york-group-theory-seminar/fall-2019>

Meets: 4:00PM – 5:30PM, Rm. 5417

Speaker: Heejoung Kim, University of Illinois at Urbana Champaign

Title: Algorithms detecting stability and Morseness for finitely generated groups

### **Commutative Algebra & Algebraic Geometry Seminar**

Webpage: <http://websupport1.citytech.cuny.edu/Faculty/hschoutens/CAAG.html>

Meets: 4:15PM – 5:15PM, Rm. 6417

Speaker:

Title: NA

**Learning Seminar: Introduction to modular forms**

Meets: 4:15PM – 5:45PM, Rm. 5382

Speaker:

Title: NA

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