Invitations to Conferences, Workshops, and Colloquia

1. **MITP, JGU Mainz** (Workshop Invite) — Mainz, Germany
   The Arithmetic of Calabi–Yau Manifolds (Upcoming) — 2025

2. **MITP, JGU Mainz** (Workshop Invite) — Mainz, Germany
   Physics and Number Theory (Upcoming) — 2025

3. **IST, Lisbon** (Workshop Invite) — Lisbon, Portugal
   Fall String Theory Workshop (Upcoming) — Oct. 2024
   Talk: On arithmetic statistics of weight 2 Hecke eigencuspforms

4. **ESI Vienna** (Workshop Invite) — Vienna, Austria
   Algebraicity and Transcendence for Singular Differential Equations (Upcoming) — Oct. 2024

5. **MIAPBP, Munich** (Workshop Invite) — Munich, Germany
   Special Functions: From Geometry to Fundamental Interactions — Aug. 2024

6. **Uni. Potsdam** (Colloquium Invite) — Potsdam, Germany
   Talk: Developments in computer assisted number theory and arithmetic geometry — May 2024

7. **GGI Florence** (Conference Invite) — Florence, Italy
   Conference on Resurgence and Modularity in QFT and String Theory — Apr./Mai 2024
   Talk: Real analytic Eisenstein series and quadratic forms in holography

8. **INI Cambridge** (Workshop Invite) — Cambridge, UK
   Black Holes: Bridges Between Number Theory and Holographic Quantum Information — Oct. 2023
   Talk: An introduction to the Birch & Swinnerton-Dyer Conjecture

9. **INI Cambridge** (Workshop Invite) — Cambridge, UK
   Black Holes: Bridges Between Number Theory and Holographic Quantum Information — Oct. 2023
   Talk: $g = 2$ hyperelliptic curve invariants, Siegel modular forms and applications

10. **Pollica Center for Physics** (Workshop Invite) — Pollica, Italy
    New connections between physics and number theory — Jun. 2023

11. **Simons Center for Geometry and Physics** (Workshop Invite) — Stony Brook, USA
    Workshop on Number Theory and Physics — Oct.-Nov. 2022
    Talk: Modularity and rational curve counts on $K3$ surfaces

12. **Simons Center for Geometry and Physics** (Workshop Invite) — Stony Brook, USA
    Workshop on Number Theory and Physics — Oct.-Nov. 2022
    Talk: Two applications of mock modular forms in string theory

13. **Simons Center for Geometry and Physics** (Workshop Invite) — Stony Brook, USA
    Workshop on Supersymmetric Black Holes, Holography and Microstate Counting — Nov. 2022

14. **Kavli IPMU** (Colloquium Invite) — Kashiwa, Japan
    Talk: Physics and the Hilbert-Pólya conjecture — Oct. 2022

15. **Riemann Center for Geometry and Physics** (Special Lecture) — Hannover, Germany
    Riemann Fellow Lecture — May 2022
    Talk: BPS Partition Functions: From physics, to number theory, to geometry

16. **Kavli IPMU/U.Tokyo** (Colloquium Invite) — Tokyo/Kashiwa, Japan
    Talk: Quantum black holes: Bridges between mathematics and physics — Oct. 2021

17. **IST Lisbon** (Workshop Invite) — Lisbon. Portugal
    Workshop on BPS Black Holes and Quantum Information — Sep. 2021
    Talk: Generalized Siegel-Weil formula, Chern-Simons invariants and $3d$-gravity

18. **Koc Uni. & Bogazici Uni.** (Conference Invite) — Istanbul, Turkey
    Mathematical Physics Days — Dec 2020
    Talk: Introduction to Moonshine in String Theory

19. **IST Lisbon** (Workshop Invite) — Lisbon, Portugal
    Black Holes: BMS, BPS and Integrability — Sep. 2020
    Talk: Mock-modular black hole entropy from negative discriminant states

20. **Simons Center for Geometry and Physics** (Workshop Invite) — Stony Brook, USA
    Workshop on Automorphic Structures in String Theory — Mar. 2019
21. **Simons Center/Flatiron Institute** (Conference Invite) — New York, USA
    Simons Conference on Number Theory, Geometry, Moonshine & Strings III — Feb. 2019
22. **Uni Wien & TU Wien** (Colloquium Invite) — Vienna, Austria
    Talk: Auguries of Physical Mathematics — Nov. 2018
23. **Erwin Schroedinger Institute** (Workshop Invite) — Vienna, Austria
    Workshop on Moonshine — Sep. 2018
    Talk: Exact entropy and Rademacher series for CHL orbifolded BPS black holes
24. **GGI Florence** (Workshop Invite) — Florence, Italy
    Supersymmetric Field Theories in the Non-perturbative Regime — Apr. 2018
    Talk: The M_{24} group and elliptic genera of $K3$ superconformal field theories

Invited Lectures and Seminars

1. **TU Eindhoven** (Seminar Invite) — Eindhoven, Netherlands
   Talk: TBD — Dec 2024
2. **ETH Zurich** (Seminar Invite) — Zurich, Switzerland
   Talk: Computational aspects of the Langlands program — July 2024
3. **Uni. Vienna** (Seminar Invite) — Vienna, Austria
   Talk: Characterization of Rational SCFTs via complex multiplication and mirror symmetry — Apr. 2024
4. **TU Vienna** (Seminar Invite) — Vienna, Austria
   Talk: Non-holomorphic Eisenstein series and quadratic forms in string theory — Apr. 2024
5. **MPI-MIS** (Seminar Invite) — Leipzig, Germany
   Talk: Rational point counts and motives for Feynman Integrals — Mar. 2024
6. **L2C CNRS, Montpellier** (Seminar Invite) — Montpellier, France
   Talk: Automorphic forms, Arithmetic and String Theory — Mar. 2024
7. **MPI for Gravitational Physics** (Seminar Invite) — Berlin/Potsdam, Germany
   Talk: Automorphic forms, Arithmetic and String Theory — Feb. 2024
8. **IISc Bengaluru** (Seminar Invite) — Bengaluru, India
   Talk: Gravitational path integrals from number theory — May 2023
9. **ICTS Bengaluru** (Lecture Invite) — Bengaluru, India
   Lecture: Connections between number theory and physics
   Part 1: Representation theory of automorphic forms, Part 2: L-functions — Apr. 2023
10. **University of Tokyo** (Seminar Invite) — Tokyo, Japan
    Talk: Introduction to the Katz-Sarnak philosophy — Apr. 2023
11. **Caltech** (Seminar Invite) — Pasadena, USA
    Talk: Gravitational path integral for $\mathcal{N} = 4$ $\frac{1}{4}$-BPS black holes from Siegel modular forms — Dec. 2022
12. **Lehigh University** (Seminar Invite) — Bethlehem, USA
    Talk: The Hilbert-Polyá conjecture: A survey — Nov. 2022
13. **Cornell** (Seminar Invite) — Ithaca, USA
    Talk: BPS States and Niemeier Lattices: An Octonionic Supergravity Story — Nov. 2022
14. **Kavli IPMU** (Seminar Invite) — Kashiwa, Japan
    Talk: Class numbers and Hilbert modular forms in supergravity — Jun. 2022
15. **ICTP** (Seminar Invite) — Trieste, Italy
    Talk: Octonionic magical supergravity, Niemeier Lattices, and Hilbert Modular Forms — Jun. 2022
16. **Institut Henri Poincaré** (Seminar Invite) — Paris, France
    Talk: Mock modularity from supergravity — Jun. 2022
17. **DESY** (Seminar Invite) — Hamburg, Germany
    Talk: Mock modularity from supergravity — Jun. 2022

18. **LU Hannover** (Seminar Invite) Hannover, Germany
    Talk: An introduction to moonshine and vertex operator algebras May 2022

19. **LU Hannover** (Seminar Invite) Hannover, Germany
    Talk: An introduction to wall crossing and Stokes phenomena Apr. 2022

20. **IST Lisbon** (Seminar Invite) Lisbon, Portugal
    Talk: An introduction to topological modular forms, $\mathcal{N}=1$ VOA's, and error correction codes Dec. 2021

21. **LMU Munich** (Seminar Invite) Munich, Germany
    Talk: Mock modular black hole entropy from supergravity Nov. 2021

22. **TU Wien & Uni Wien** (Seminar Invite) Vienna, Austria
    Talk: An introduction to topological modular forms, $\mathcal{N}=1$ VOA's, and error correction codes Nov. 2021

23. **Kavli IPMU** (Seminar Invite) Kashiwa, Japan
    Talk: Mock modular black hole entropy from supergravity Oct. 2021

24. **Nagoya U** (Seminar Invite) Nagoya, Japan
    Talk: Mock modular black hole entropy from supergravity Oct. 2021

25. **TU Wien & Uni Wien** (Seminar Invite) Vienna, Austria
    Talk: Generalized Siegel-Weil formula, Chern-Simons invariants, and $3d$-gravity Aug. 2021

26. **Kavli IPMU** (Seminar Invite) Kashiwa, Japan
    Talk: Comments on number theory and geometry in string theory Oct. 2020

27. **Rutgers** (Seminar Invite) New Brunswick, USA
    Talk: Computing $\frac{1}{4}$-BPS degeneracies and comments on instanton moduli spaces Apr. 2020

28. **ICTP** (Seminar Invite) Trieste, Italy
    Talk: Single center BH degeneracies in $4d, \mathcal{N}=4$ string theory from Dabholkar–Harvey states Jan. 2020

29. **Stanford** (Seminar Invite) Palo Alto, USA
    Talk: Counting $\frac{1}{4}$-BPS black holes in $4d, \mathcal{N}=4$ from $\frac{1}{2}$-BPS degeneracies Dec. 2019

30. **TU Wien** (Seminar Invite) Vienna, Austria
    Talk: Wall crossing and jumping in string theory and supersymmetric gauge theories Oct. 2019

31. **ICTS** (Seminar Invite) Bangalore, India
    Talk: Towards exact matching of black hole degeneracies from localization and number theory Oct. 2019

32. **IISc** (Seminar Invite) Bangalore, India
    Talk: Towards exact matching of black hole degeneracies from localization and number theory Oct. 2019

33. **TU Wien** (Seminar Invite) Vienna, Austria
    Talk: Arithmetic chaos, zeroes of the Riemann $\zeta(s)$ function and topological recursions Sep. 2019

34. **Stanford** (Seminar Invite) Palo Alto, USA
    Talk: Comments on number theory and geometry for black holes Mar. 2016

35. **U. Amsterdam** (Seminar Invite) Amsterdam, Netherlands
    Talk: Number theory and geometry for negative discriminant states in string theory Feb. 2019

36. **Uni Wien** (Seminar Invite) Vienna, Austria
    Talk: Reconstruction of the Igusa cusp form from localization in supergravity Dec. 2018

37. **MPP Munich** (Seminar Invite) Munich, Germany
    Talk: Automorphic properties of dyon wall crossing in string theory Nov. 2018

38. **IST Lisbon** (Seminar Invite) Lisbon, Portugal
    Talk: BPS algebras and moonshine phenomena Oct. 2018

39. **IST Lisbon** (Seminar Invite) Lisbon, Portugal
    Talk: $\Gamma_0(N)$, quantum black holes, and wall crossing Oct. 2018

40. **IISc** (Seminar Invite) Bangalore, India
    Talk: Calabi-Yau manifolds and sporadic groups Dec. 2017

41. **IMSc** (Seminar Invite) Chennai, India
    Talk: Calabi-Yau manifolds and sporadic groups Dec. 2017

42. **Uni Wien** (Seminar Invite)   Vienna, Austria
    Talk: Calabi-Yau manifolds and sporadic groups   Nov. 2017
43. **Erwin Schroedinger Institute** (Seminar Invite)   Vienna, Austria
    Talk: Entanglement entropy in $U(1)$ gauge theories   2017
44. **TU Wien** (Seminar Invite)   Vienna, Austria
    Talk: Some constraints on superconformal field theories   Oct. 2016