

# Sebastian Mizera | Curriculum Vitae

Princeton University – Jadwin Hall, Washington Road – Princeton, NJ 08544, USA

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## Academic Positions

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<b>Columbia University</b> Assistant Professor, Department of Physics	<b>New York, NY, USA</b> <i>July 2025–</i>
<b>Princeton University</b> Lecturer in Physics, Postdoctoral Research Associate, Department of Physics	<b>Princeton, NJ, USA</b> <i>2024–</i>
<b>Princeton Center for Theoretical Science</b> Affiliated Postdoctoral Fellow	<b>Princeton, NJ, USA</b> <i>2024–</i>
<b>Institute for Advanced Study</b> Visiting Associate, School of Natural Sciences	<b>Princeton, NJ, USA</b> <i>2024–</i>
<b>Institute for Advanced Study</b> Long-Term Member, School of Natural Sciences Roger Dashen Member (2023–24), Sivian Fund Member (2022–24), Frank & Peggy Taplin Member (2020–22), Founders' Circle Member (2019–20)	<b>Princeton, NJ, USA</b> <i>2019–2024</i>

## Education

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<b>Perimeter Institute for Theoretical Physics &amp; University of Waterloo</b> Doctor of Philosophy (PhD) Advised by Freddy Cachazo & Bianca Dittrich Thesis title “ <i>Aspects of Scattering Amplitudes and Moduli Space Localization</i> ”	<b>Waterloo, ON, Canada</b> <i>2015–19</i>
<b>University of Cambridge</b> Master of Mathematics (MMath), <i>Merit</i> Part III Mathematics; member of Girton College	<b>Cambridge, UK</b> <i>2014–15</i>
<b>University of Cambridge</b> Bachelor of Arts (BA Hons), <i>First class</i> Part II Experimental & Theoretical Physics; Part IA, IB Natural Sciences; member of Girton College Master of Arts (academic rank)	<b>Cambridge, UK</b> <i>2011–14</i>

## Grants & Awards

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<b>Wolfram Innovator Award</b> Wolfram Research	<b>Champaign, IL, USA</b> <i>2024</i>
<b>University Reserach Fellowship, University of Oxford (£1.83 million, declined)</b> Royal Society	<b>Oxford, UK</b> <i>2024</i>
<b>Outstanding Reviewer Award</b> Institute of Physics (IOP) Publishing	<b>Bristol, UK</b> <i>2022</i>
<b>Perimeter Award, Marie Curie Graduate Student Award</b> Perimeter Institute & University of Waterloo	<b>Waterloo, ON, Canada</b> <i>2015–2019</i>
<b>M.T. Meyer Scholarship, Gertrude Mather Jackson Prize</b> Girton College, University of Cambridge	<b>Cambridge, UK</b> <i>2015</i>
<b>Hammond Science Communication Second Prize and Audience Prize</b> Girton College, University of Cambridge	<b>Cambridge, UK</b> <i>2015</i>
<b>Sir Francis Goldsmid Scholarship, Emily Davies Scholarship, Ida Freund Prize</b> Girton College, University of Cambridge	<b>Cambridge, UK</b> <i>2011–2014</i>

## Books (authors are listed in alphabetical order)

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- Records from the S-Matrix Marathon** [2409.14947]  others  
Springer Lecture Notes in Physics  
N. Arkani-Hamed, M. Giroux, H.S. Hannesdottir, S. Mizera, C. Pasiecznik (editors)
- What is the  $i\epsilon$  for the S-matrix?** [2204.02988]  
SpringerBriefs in Physics  
H.S. Hannesdottir, S. Mizera  
ISBN 978-3-031-18257-0 (softcover), 978-3-031-18258-7 (eBook), Springer, Cham (2023)
- Aspects of Scattering Amplitudes and Moduli Space Localization** [1906.02099]  
Springer Theses  
S. Mizera  
ISBN 978-3-030-53009-9 (hardcover), 978-3-030-53010-5 (eBook), Springer, Cham (2020)

## Publications (authors are listed in alphabetical order except for \*)

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- Rademacher expansion of modular integrals** [2501.13827]  
M.M. Baccianti, J. Chandra, L. Eberhardt, T. Hartman, S. Mizera
- Regge Limit of One-Loop String Amplitudes** [2403.07064]  
Submitted to SciPost Phys.  
P. Banerjee, L. Eberhardt, S. Mizera
- Lorentzian contours for tree-level string amplitudes** [2403.07051]  
SciPost Phys. **17** (2024) 078  
L. Eberhardt, S. Mizera
- Cutting-Edge Tools for Cutting Edges** [2402.19415]  
Encyclopedia of Mathematical Physics  
R. Britto, C. Duhr, H.S. Hannesdottir, S. Mizera
- Language Models as Science Tutors\*** [2402.11111]  
Proc. 41st Int. Conf. Mach. Learn. 235:8310-8335 (2024)  
A. Chevalier, J. Geng, A. Wettig, H. Chen, S. Mizera, et al.
- Principal Landau Determinants** [2311.16219]  
Comput. Phys. Commun. **303** (2024) 109278  
C. Fevola, S. Mizera, S. Telen
- Landau Singularities Revisited: Computational Algebraic Geometry for Feynman Int.** [2311.14669]  
Phys. Rev. Lett. **132** (2024) 10, 101601  
C. Fevola, S. Mizera, S. Telen
- Crossing beyond scattering amplitudes** [2310.12199]  
JHEP **04** (2024) 060  
S. Caron-Huot, M. Giroux, H.S. Hannesdottir, S. Mizera
- Scattering with Neural Operators** [2308.14789]  
Phys. Rev. D **108** (2023) 10, L101701  
S. Mizera
- What can be measured asymptotically?** [2308.02125]  
JHEP **01** (2024) 139  
S. Caron-Huot, M. Giroux, H.S. Hannesdottir, S. Mizera
- Four Lectures on Euler Integrals** [2306.13578]  
SciPost Phys. Lect. Notes **75** (2023)  
S. Matsubara-Heo, S. Mizera, S. Telen

- Physics of the Analytic S-Matrix** [2306.05395]  
 Phys. Rept. **1047** (2024) 1-92  
 S. Mizera
- Evaluating one-loop string amplitudes** [2302.12733]  
 SciPost Phys. **15** (2023) 119  
 L. Eberhardt, S. Mizera
- Natural Boundaries for Scattering Amplitudes** [2210.11448]  
 SciPost Phys. **14** (2023) 101  
 S. Mizera
- Unitarity Cuts of the Worldsheet** [2208.12233]  
 SciPost Phys. **14** (2023) 015  
 L. Eberhardt, S. Mizera
- Celestial Geometry** [2204.02505]  
 JHEP **09** (2022) 045  
 S. Mizera, S. Pasterski
- Feynman Polytopes and the Tropical Geometry of UV and IR Divergences** [2202.12296]  
 Phys. Rev. D **105**, 125013 (2022)  
 N. Arkani-Hamed, A. Hillman, S. Mizera
- On Unitarity of Tree-Level String Amplitudes** [2201.11575]  
 JHEP **02** (2022) 197  
 N. Arkani-Hamed, L. Eberhardt, Y.-t. Huang, S. Mizera
- Landau Discriminants** [2109.08036]  
 JHEP **08** (2022) 200  
 S. Mizera, S. Telen
- Crossing Symmetry in the Planar Limit** [2104.12776]  
 Phys. Rev. D **104**, 045003 (2021)  
 S. Mizera
- Coaction and double-copy properties of configuration-space integrals at genus zero** [2102.06206]  
 JHEP **05** (2021) 053  
 R. Britto, S. Mizera, C. Rodriguez, O. Schlotterer
- Bounds on Crossing Symmetry** [2101.08266]  
 Phys. Rev. D **103**, L081701 (2021)  
 S. Mizera
- Decomposition of Feynman Integrals by Multivariate Intersection Numbers** [2008.04823]  
 JHEP **03**, 027 (2021)  
 H. Frellesvig, F. Gasparotto, S. Laporta, M.K. Mandal, P. Mastrolia, L. Mattiuzzi, S. Mizera
- Scattering Equations in AdS: Scalar Correlators in Arbitrary Dimensions** [2007.06574]  
 JHEP **11**, 158 (2020)  
 L. Eberhardt, S. Komatsu, S. Mizera
- Loop amplitudes monodromy relations and color-kinematics duality** [2005.05329]  
 JHEP **21**, 048 (2020)  
 E. Casali, S. Mizera, P. Tourkine
- Status of Intersection Theory and Feynman Integrals** [2002.10476]  
 PoS (MA2019) 016  
 S. Mizera
- Kinematic Jacobi Identity is a Residue Theorem** [1912.03397]  
 Phys. Rev. Lett. **124**, no.14, 141601 (2020)  
 S. Mizera

- From Infinity to Four Dimensions: Higher Residue Pairings and Feynman Integrals** [1910.11852]  
 JHEP **02**, 159 (2020)  
 S. Mizera, A. Pokraka
- Monodromy relations from twisted homology** [1910.08514]  
 JHEP **12**, 087 (2019)  
 E. Casali, S. Mizera, P. Tourkine
- Vector Space of Feynman Integrals and Multivariate Intersection Numbers** [1907.02000]  
 Phys. Rev. Lett. **123** (2019) 201602  
 H. Frellesvig, F. Gasparotto, M.K. Mandal, P. Mastrolia, L. Mattiazzi, S. Mizera
- Scattering Equations: From Projective Spaces to Tropical Grassmannians** [1903.08904]  
 JHEP **1906** (2019) 039  
 F. Cachazo, N. Early, A. Guevara, S. Mizera
- Decomposition of Feynman Integrals on the Maximal Cut by Intersection Numbers** [1901.11510]  
 JHEP **1905** (2019) 153  
 H. Frellesvig, F. Gasparotto, S. Laporta, M.K. Mandal, P. Mastrolia, L. Mattiazzi, S. Mizera
- $\Delta$ -Algebra and Scattering Amplitudes** [1812.01168]  
 JHEP **1902** (2019) 005  
 F. Cachazo, N. Early, A. Guevara, S. Mizera
- Feynman Integrals and Intersection Theory** [1810.03818]  
 JHEP **1902** (2019) 139  
 P. Mastrolia, S. Mizera
- Perturbative Methods for Effective Field Theories and the Double Copy** [1809.02096]  
 JHEP **1810** (2018) 018  
 S. Mizera, B. Skrzypek
- The S Matrix of 6D Super Yang-Mills and Maximal Supergravity from Rational Maps** [1805.11111]  
 JHEP **1809** (2018) 125  
 F. Cachazo, A. Guevara, M. Heydeman, S. Mizera, J.H. Schwarz, C. Wen
- Scattering Amplitudes from Intersection Theory** [1711.00469]  
 Phys. Rev. Lett. **120** (2018) 141602  
 S. Mizera
- Renormalization of Tensor Networks Using Graph Independent Local Truncations\*** [1709.07460]  
 Phys. Rev. **B97** (2018) 045111  
 M. Hauru, C. Delcamp, S. Mizera
- Combinatorics and Topology of Kawai-Lewellen-Tye Relations** [1706.08527]  
 JHEP **08** (2017) 097  
 S. Mizera
- A String Deformation of the Parke-Taylor Factor** [1705.10323]  
 Phys. Rev. **D96** (2017) 066016  
 S. Mizera, G. Zhang
- Echoes of Asymptotic Silence in Causal Set Quantum Gravity** [1703.08454]  
 Class. Quant. Grav. **34** (2017) 16LT01  
 A. Eichhorn, S. Mizera, S. Surya
- Can Scalars Have Asymptotic Symmetries?** [1703.07885]  
 Phys. Rev. **D97** (2018) 046002  
 M. Campiglia, L. Coito, S. Mizera

<b>CHY Loop Integrands from Holomorphic Forms</b> JHEP <b>03</b> (2017) 092 H. Gomez, S. Mizera, G. Zhang	[1612.06854]
<b>Inverse of the String Theory KLT Kernel</b> JHEP <b>06</b> (2017) 084 S. Mizera	[1610.04230]
<b>Scattering Equations: Real Solutions and Particles on a Line</b> JHEP <b>03</b> (2017) 151 F. Cachazo, S. Mizera, G. Zhang	[1609.00008]
<b>Extensions of Theories from Soft Limits</b> JHEP <b>06</b> (2016) 170 F. Cachazo, P. Cha, S. Mizera	[1604.03893]
<b>Decorated Tensor Network Renorm. for Lattice Gauge Theories and Spin Foam Models</b> New J. Phys. <b>18</b> (2016) 053009 B. Dittrich, S. Mizera, S. Steinhaus	[1409.2407]
<b>Spectral Dimension in Causal Set Quantum Gravity</b> Class. Quant. Grav. <b>31</b> (2014) 125007 A. Eichhorn, S. Mizera	[1311.2530]
<b>Multi-Colour Detection of Gravitational Arcs</b> Astron. Astrophys. <b>567</b> (2014) A111 M. Maturi, S. Mizera, G. Seidel	[1305.3608]

## Research Stays & Placements

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<b>Niels Bohr Institute, University of Copenhagen</b> Supported by a grant from the Rosenfeld Foundation	<b>Copenhagen, Denmark</b> <i>December 2021</i>
<b>Mathematical Institute, University of Oxford</b> Mathematical physics group	<b>Oxford, UK</b> <i>August–September 2019</i>
<b>Institute for Advanced Study</b> School of Natural Sciences; visiting Nima-Arkani Hamed	<b>Princeton, NJ, USA</b> <i>May–June, August 2018</i>
<b>University of Cambridge &amp; Cancer Research UK</b> VISIONLab at the Cavendish Laboratory; supervised by Sarah Bohndiek & Frédéric Brochu	<b>Cambridge, UK</b> <i>June–August 2015</i>
<b>Perimeter Institute for Theoretical Physics</b> Supervised by Bianca Dittrich	<b>Waterloo, ON, Canada</b> <i>June–August 2014</i>
<b>Perimeter Institute for Theoretical Physics</b> Supervised by Astrid Eichhorn	<b>Waterloo, ON, Canada</b> <i>June–August 2013</i>
<b>Institute of Theoretical Astrophysics, Heidelberg University</b> Matthias Bartelmann group; supervised by Luigi Iapichino & Matteo Maturi	<b>Heidelberg, Germany</b> <i>June–September 2012</i>

## Conference Talks

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<b>Amplitudes and Combinatorics Synergy Event</b> Institute for Advanced Study	<b>Princeton, NJ, USA</b> <i>October 2024</i>
<b>Celestial Holography Summer School 2024</b> Perimeter Institute for Theoretical Physics	<b>Waterloo, ON, Canada</b> <i>July 2024</i>
<b>S-Matrix Bootstrap 2024 Workshop</b> University of Iceland	<b>Reykjavik, Iceland</b> <i>June 2024</i>

<b>Conference “Spacetime and String Theory”</b> Kavli Institute for Theoretical Physics, UC Santa Barbara	<b>Santa Barbara, CA, USA</b> <i>April 2024</i>
<b>Conference “Positive Geometry in Particle Physics and Cosmology”</b> Max Planck Institute for Mathematics in the Sciences	<b>Leipzig, Germany</b> <i>February 2024</i>
<b>Workshop “QCD Meets EW”</b> CERN	<b>Geneva, Switzerland</b> <i>February 2024</i>
<b>S-Matrix Bootstrap V Workshop</b> SwissMAP Research Station	<b>Les Diablerets, Switzerland</b> <i>August 2023</i>
<b>Conference “From Amplitudes to Gravitational Waves”</b> Nordic Institute for Theoretical Physics (Nordita)	<b>Stockholm, Sweden</b> <i>July 2023</i>
<b>Strings 2023 Conference</b> Perimeter Institute for Theoretical Physics	<b>Waterloo, ON, Canada via Zoom</b> <i>July 2023</i>
<b>RADCOR 2023: 16th International Symposium on Radiative Corrections</b> Higgs Centre, University of Edinburgh	<b>Crieff, UK</b> <i>May 2023</i>
<b>Higgs Centre School of Theoretical Physics 2023</b> Higgs Centre, University of Edinburgh	<b>Edinburgh, UK</b> <i>May 2023</i>
<b>Workshop “Tropical and Convex Geometry and Feynman integrals”</b> Institute for Theoretical Studies, ETH Zurich	<b>Zurich, Switzerland</b> <i>September 2022</i>
<b>Amplitudes 2022 Conference</b> Charles University	<b>Prague, Czech Republic</b> <i>August 2022</i>
<b>Conference “Bohr-100: Current Themes in Theoretical Physics”</b> Niels Bohr International Academy, University of Copenhagen	<b>Copenhagen, Denmark</b> <i>August 2022</i>
<b>MIAPbP Workshop “Novel Developments in Scattering Amplitudes”</b> Munich Institute for Astro-, Particle and BioPhysics	<b>Garching, Germany</b> <i>July 2022</i>
<b>Workshop on Nonlinear Algebra and Combinatorics from Physics</b> CMSA, Harvard University	<b>Cambridge, MA, USA</b> <i>April 2022</i>
<b>S-matrix Bootstrap IV Workshop</b> Simons Collaboration on Nonperturbative Bootstrap	<b>Heraklion, Crete, Greece</b> <i>April 2022</i>
<b>Workshop “YOUNGST@RS – Rebuilding the Tower of Babel”</b> Mainz Institute for Theoretical Physics, Johannes Gutenberg University	<b>Mainz, Germany via Zoom</b> <i>April 2022</i>
<b>2022 Chennai-Southampton Workshop</b> STAG Research Centre, Southampton University and IIT Madras	<b>Southampton, UK via Zoom</b> <i>March 2022</i>
<b>Elliptics ’21 Conference</b> Uppsala University	<b>Uppsala, Sweden via Zoom</b> <i>October 2021</i>
<b>DESY Theory Workshop “Bright ideas for a dark universe”</b> Deutsches Elektronen-Synchrotron (DESY)	<b>Hamburg, Germany via Zoom</b> <i>September 2021</i>
<b>Workshop on Celestial Amplitudes and Flat Space Holography</b> European Institute for Sciences and their Applications	<b>Corfu, Greece via Zoom</b> <i>September 2021</i>
<b>Amplitudes 2021 Conference</b> Niels Bohr Institute, University of Copenhagen	<b>Copenhagen, Denmark via Zoom</b> <i>August 2021</i>

<b>Strings 2021 Conference</b> ICTP South American Institute for Fundamental Research	<b>São Paulo, Brazil via Zoom</b> <i>June 2021</i>
<b>“Positive Geometries in Scattering Amplitudes and Beyond” Workshop</b> Mainz Institute for Theoretical Physics, Johannes Gutenberg University	<b>Mainz, Germany via Zoom</b> <i>June 2021</i>
<b>“California Amplitudes Meeting 2021” Workshop</b> University of California, Los Angeles	<b>Los Angeles, CA, USA via Zoom</b> <i>March 2021</i>
<b>“Geomplitudes II” Workshop</b> QMAP, University of California, Davis	<b>Davis, CA, USA via Zoom</b> <i>February 2021</i>
<b>“QCD Meets Gravity VI” Workshop</b> Northwestern University	<b>Evanston, IL, USA via Zoom</b> <i>November 2020</i>
<b>“Scattering Amplitudes and Beyond” Online Reunion Conference</b> Kavli Institute for Theoretical Physics, UC Santa Barbara	<b>Santa Barbara, CA, USA via Zoom</b> <i>August 2020</i>
<b>“Recent Developments in S-matrix theory” Conference</b> International Centre for Theoretical Sciences, Tata Institute of Fundamental Research	<b>Bangalore, India via Zoom</b> <i>July 2020</i>
<b>Amplitudes 2020 Conference</b> Brown University	<b>Providence, RI, USA via Zoom</b> <i>May 2020</i>
<b>“stringtheory.pl/2019” Conference</b> Jagiellonian University	<b>Kraków, Poland</b> <i>December 2019</i>
<b>“MathemAmplitudes 2019: Intersection Theory &amp; Feynman Integrals” Conference</b> University of Padova	<b>Padova, Italy</b> <i>December 2019</i>
<b>“Spacetime and Quantum Mechanics Master Class” Workshop</b> Center of Mathematical Sciences and Applications, Harvard University	<b>Cambridge, MA, USA</b> <i>October 2019</i>
<b>“String Field Theory and String Perturbation Theory” Conference</b> Galileo Galilei Institute for Theoretical Physics	<b>Florence, Italy</b> <i>May 2019</i>
<b>Amplitudes 2018 Conference</b> SLAC National Accelerator Laboratory, Stanford University	<b>Menlo Park, CA, USA</b> <i>June 2018</i>
<b>“New Directions in Conventional and Ambitwistor String Theories” Workshop</b> Perimeter Institute for Theoretical Physics	<b>Waterloo, ON, Canada</b> <i>April 2018</i>
<b>“QCD Meets Gravity” Workshop</b> Mani L. Bhaumik Institute for Theoretical Physics, UCLA	<b>Los Angeles, USA</b> <i>December 2017</i>
<b>Amplitudes 2017 Summer School</b> Higgs Centre, University of Edinburgh	<b>Edinburgh, UK</b> <i>July 2017</i>
<b>“Infrared Problems in QED and Quantum Gravity” Workshop</b> Perimeter Institute for Theoretical Physics	<b>Waterloo, Canada</b> <i>December 2016</i>

## Invited Seminars

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<b>High Energy Theory Seminar, Princeton University</b>	<b>Princeton, NJ, USA</b> <i>December 2024</i>
<b>String Seminar, International Centre for Theoretical Sciences</b>	<b>Bengaluru, India via Zoom</b> <i>November 2024</i>
<b>“Quantum Gravity and All of That” seminar series</b>	<b>Online via Zoom</b> <i>November 2024</i>

MPP Colloquium, Max Planck Institute for Physics	Munich, Germany <i>November 2024</i>
Theory Colloquium, CERN	Geneva, Switzerland <i>February 2024</i>
Colloquium, Perimeter Institute for Theoretical Physics	Waterloo, ON, Canada <i>January 2024</i>
Theory Seminar, Department of Physics, Columbia University	New York, NY, USA <i>January 2024</i>
IAS Amplitudes Group Meeting	Princeton, NJ, USA <i>November 2022</i>
High Energy Physics Seminar, Department of Physics, City College of New York	New York, NY, USA <i>November 2023</i>
Theory Seminar, Department of Physics, Columbia University	New York, NY, USA <i>November 2023</i>
Particle Theory Seminar, Department of Physics, Yale University	New Haven, CT, USA <i>September 2023</i>
Nuclear and Particle Theory Seminar, Center for Theoretical Physics, MIT	Cambridge, MA, USA <i>September 2023</i>
Seminar on Nonlinear Algebra, Max Planck Institute for Math. in the Sciences	Leipzig, Germany <i>July 2023</i>
Lectures on Scattering, Max Planck Institute for Math. in the Sciences	Leipzig, Germany <i>July 2023</i>
String Theory Seminar, Mathematical Institute, University of Oxford	Oxford, UK <i>June 2023</i>
Cosmology Journal Club, DAMTP, University of Cambridge	Cambridge, UK <i>June 2023</i>
AnLy Strings & Fields Seminar, LAPTh Annecy and University of Lyon	Annecy, France via Zoom <i>April 2023</i>
Theoretical High Energy Seminar, McGill University	Montreal, QC, Canada <i>March 2023</i>
Wordliners Meeting	Online via Teams <i>November 2022</i>
Physics Mini-Symposium, University of Michigan	Ann Arbor, MI, USA <i>October 2022</i>
String Theory Seminar, DESY	Hamburg, Germany via Zoom <i>October 2022</i>
Particle Theory Seminar, Kadanoff Center, University of Chicago	Chicago, IL, USA via Zoom <i>October 2022</i>
IAS Amplitudes Group Meeting	Princeton, NJ, USA <i>October 2022</i>
Theory Colloquium, CERN	Geneva, Switzerland <i>April 2022</i>
Journal club, Max Planck Institute for Physics	Munich, Germany via Zoom <i>April 2022</i>
EPP Theory Seminar, SLAC Nat. Acc. Lab., Stanford University	Menlo Park, CA, USA via Zoom <i>April 2022</i>



Amplitudes @ Padova seminar, University of Padova Padova, Italy via Zoom  
*April 2022*

Geometry, Algebra, Physics Seminar, Dept. of Math., Penn State State College, PA, USA via Zoom  
*March 2022*

Quantum Fields and Strings Seminar, DAMTP, University of Cambridge Cambridge, UK via Zoom  
*February 2022*

TEP Seminar, Mani L. Bhaumik Inst. for Theoretical Physics, UCLA Los Angeles, CA, USA via Zoom  
*February 2022*

Quantum Encounters Seminar, IHÉS Bures-sur-Yvette, France via Zoom  
*November 2021*

Fields, Strings, Gravity Seminar, QMAP, University of California, Davis Davis, CA, USA via Zoom  
*September 2021*

Quantum Spacetime Seminar Series, Tata Institute of Fundamental Research Mumbai, India via Zoom  
*August 2021*

Online seminar on motives and period integrals in QFT and string theory Paris, France via Zoom  
*May 2021*

Simons Bootstrap Collaboration Seminar Stony Brook, NY, USA via Zoom  
*May 2021*

Quantum Fields and Strings seminar, Perimeter Institute Waterloo, ON, Canada via Zoom  
*May 2021*

Journal club, Centro de Física do Porto, University of Porto Porto, Portugal via Zoom  
*April 2021*

Theory seminar, National Institute for Subatomic Physics Amsterdam, Netherlands via Zoom  
*March 2021*

High Energy Theory Seminar, California Institute of Technology Pasadena, CA, USA via Zoom  
*February 2021*

Joint Theory Seminar, NBIA, University of Copenhagen Copenhagen, Denmark via Zoom  
*February 2021*

Maths HEP Lunchtime Seminar, CPT, Durham University Durham, UK via Zoom  
*November 2020*

Geometry and scattering amplitudes journal club, LMU Munich Munich, Germany via Zoom  
*November 2020*

Physics group meeting, Institute for Advanced Study Princeton, NJ, USA via Zoom  
*November 2020*

HET Seminar, LCTP, University of Michigan Ann Arbor, MI, USA via Zoom  
*October 2020*

McGill HEP Zoom Talk, McGill University Montreal, QC, Canada via Zoom  
*May 2020*

Journal club talk, Mani L. Bhaumik Institute for Theoretical Physics, UCLA Los Angeles, CA, USA  
*February 2020*

EPP Theory Seminar, SLAC National Accelerator Lab., Stanford University Menlo Park, CA, USA  
*February 2020*

HET Seminar, Mitchell Institute, Texas A&M University College Station, TX, USA  
*February 2020*

Quantum Field and String Theory Group seminar, Humboldt University Berlin, Germany  
*December 2019*

HET Seminar, New High Energy Theory Center, Rutgers University	Piscataway, NJ, USA November 2019
High Energy Theory Seminar, Institute for Advanced Study	Princeton, NJ, USA September 2019
Relativity Seminar, Mathematical Institute, University of Oxford	Oxford, UK August 2019
Journal club talk, CRST, Queen Mary University of London	London, UK August 2019
TH String Theory Seminar, CERN	Geneva, Switzerland April 2019
Theoretical Physics Group seminar, University of Padova	Padova, Italy May 2019
Theoretical High Energy Seminar, McGill University	Montreal, QC, Canada February 2019
Fields, Strings, Gravity Seminar, QMAP, University of California, Davis	Davis, CA, USA January 2019
Quantum Fields and Strings group meeting, Perimeter Institute	Waterloo, ON, Canada September 2018
HET Seminar, Niels Bohr International Academy, University of Copenhagen	Copenhagen, Denmark September 2018
Informal HET Seminar, Institute for Advanced Study	Princeton, NJ, USA May 2018
Fields, Strings, Gravity Seminar, QMAP, University of California, Davis	Davis, CA, USA February 2018
Quantum Fields and Strings group meeting, Perimeter Institute	Waterloo, ON, Canada March 2017

## Teaching & Service

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Organizer of the IAS physics group meetings and seminars in Princeton, NJ during September 2022–August 2024

Organizer of the IAS Amplitudes Group Meetings in Princeton, NJ during February 2021–August 2024

Organizer of the conference “*Amplitudes 2024*” and the associated summer school in Princeton, NJ on 10–21 June 2024

Organizer of the workshop “*The S-Matrix Marathon*” in Princeton, NJ on 11–22 March 2024

Organizer of the workshop “*Tropical Geometry and Infrared Divergences*” in Princeton, NJ on 2–6 October 2023

Organizer of the workshop “*String Amplitudes at Finite  $\alpha'$* ” in Princeton, NJ on 13–17 February 2023

Organizer of the workshop “*Possible and Impossible in Effective Field Theory: From the S-Matrix to the Swampland*” in Princeton, NJ on 2–4 May 2022

Organizer of the workshop “*MathemAmplitudes 2019: Intersection Theory & Feynman Integrals*” in Padova, Italy on 18–20 December 2019

Teaching Assistant for the PSI course “*Explorations in String Theory*” taught by Freddy Cachazo and Oliver Schlotterer (Winter 2018)

Project supervisor at the PSI Winter Schools 2016 & 2018

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