Prof. Dr. Matthias Kaminski

Associate Professor

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### Publications according to http://inspirehep.net/author/profile/M.Kaminski.1

Citations  $\geq 2,770 \ (2,960)$ Sources: INSPIREHEP (Google Scholar)

25 h-index

2022

Citations per published paper 63.6

**Publications**  $\geq$  52 research articles, 3 books as editor

#### Professional Experience

2021–present	Tenured associate professor at the University of Alabama, Tuscaloosa, AL.
2020-present	Vice-chair (communication & outreach) of the Department of Physics & Astronomy, University of Alabama, Tuscaloosa, AL.
2015-2021	Assistant professor at the University of Alabama, Tuscaloosa, AL.
2014	Offered assistant professor position at NORDITA, Stockholm (declined).
2014–present	${\it Grant\ review\ for\ Alexander\ von\ Humboldt,\ DAAD,\ DOE,\ NSF,\ and\ COST.}$
2011–2014	Postdoc at University of Washington, Seattle, WA.
2009–2011	Postdoc at Princeton University, Princeton, NJ.
2008-2009	Postdoc at the Instituto de Fisica Teórica UAM/CSIC, Madrid.
2008-present	Referee for Physical Review Letters Physical Review D. JHEP Nuclear

Sabbatical year Universität Würzburg (AGs Erdmenger, Thomale, Trauzettel).

Referee for Physical Review Letters, Physical Review D, JHEP, Nuclear 2008-present

Physics B, and the European Physical Journal.

2005-2008 Research as PhD student at Max-Planck-Institut für Physik, München.

#### Degrees & Education

2008 Degree 'Dr. rer. nat.', summa cum laude in physics received from

> Ludwig-Maximilians-Universität München, Germany Thesis: Holographic quark gluon plasma with flavor

2005 Degree 'Diplom Physiker' (grade: "sehr gut") from Bayerische

Julius-Maximilians-Universität Würzburg, Germany

Thesis: Collider phenomenology: Production of polarized vector bosons in

the noncommutative standard model

2003 **Degree 'Master of Science'** in physics from the University of New Mex-

ico, Albuquerque, NM, USA.

Experimental and theoretical research in condensed matter physics

Honors and Awards

2009–2011 DFG Research Fellowship "Forschungsstipendium".

2008 Annual Arnold Sommerfeld PhD Prize (LMU München).

2008 Arnold-Sommerfeld-Center Graduate School of the LMU München, and

International Max Planck Research School (IMPRS) of the Max-Planck-Institut für Physik (Werner-Heisenberg-Institut) completed successfully.

2002-2003 DAAD Exchange Student Fellowship.

Funding, Service, Teaching, Skills

Funding Funding raised in grants to date since 2013: > \$800,000.

Organization Organizer of more than 20 conferences and summer schools.

Initiated and organizing the International Graduate Student Exchange Program (IGREP) between UA and universities in Germany and Spain.

Co-founder and organizer of international online seminar series HoloTube.

Advisory Boards Former GAIN board member (German Academic International Network).

Scientific advisory board member for several conferences (e.g. "Numerical Relativity & Holography", University of Santiago de Compostela, Spain).

Teaching Supervised 5 PhD and 1 master students, ≥10 undergraduate students,

1 postdoc, taught/designed multiple graduate & undergraduate courses,

various summer schools.

Computing Experienced with Mathematica, Python, JAVA, FORM, familiar with

FORTRAN, C, Maple, and HTML, experienced in online teaching/collaboration.

Languages German (native), English (fluent), Spanish (fluent).

Invited colloquia, conference talks, and seminars

since 2015 More than 50 invited talks at conferences/seminars, among them: 2 public

talks, more than 5 colloquium talks.

since 2007 More than 100 invited talks.

Düshorn, Germany, December 26, 2023

# LIST OF TALKS SINCE 2020

2023	
$ m Jul~5^{th}$	Conference talk: <i>Ultraviolet-regulated theory of non-linear diffusion</i> , KITP Program: The Many Faces of Relativistic Fluid Dynamics, UC Santa Barbara, U.S.A. (in-person).
Jun 1 <sup>st</sup>	Colloquium talk: $Hydrodynamics$ , $Thermalization & Entanglement from Spacetime Geometry$ , HFHF Colloquium, Justus-Liebig-Universität Gießen, Germany (in-person).
Mar 29 <sup>th</sup>	Conference talk: Early time dynamics far from equilibrium via holography, Hard Probes 2023 (11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions), Aschaffenburg, Germany (in-person).
Mar 23 <sup>rd</sup>	Conference talk: <i>Ultraviolet-regulated theory of non-linear diffusion</i> , 86. DPG-Frühjahrstagung, Matter and Cosmos Section (SMuK), Dresden, Germany (in-person).
Feb 9 <sup>th</sup>	Seminar talk: Relativistic spin hydrodynamics with torsion, Nuclear Theory Seminar, Ohio State University, Ames, OH (in-person).
2022	
Nov 25 <sup>th</sup>	Seminar talk: Convergence of hydrodynamics in rapidly spinning strongly coupled plasma, Triangle Seminar, Utrecht, Netherlands (in person).
Nov 24 <sup>th</sup>	Seminar talk: Chiral Hydrodynamics in Strong Magnetic Fields, Seminar, Leiden, Netherlands (in person).
Nov 7 <sup>th</sup>	Conference talk: Speed of sound and chiral magnetic effect in expanding holographic plasma, APCTP Workshop "QCD and gauge/gravity duality", Pohang, South Korea (in person).
Oct 24 <sup>th</sup>	Conference talk: $Hydrodynamics$ , $Thermalization~&Entanglement~from~Spacetime~Geometry$ , HIPSTARS 2022, Havana, Cuba (online).
$\mathrm{Jul}\ 27^{\mathrm{th}}$	Conference talk: $Hydrodynamics$ , $Thermalization~&Entanglement~from~Spacetime~Geometry$ , CTQMAT22 - International Conference on Complexity and Topology in Quantum Matter, Würzburg, Germany (in person).
May 26 <sup>th</sup>	Conference talk: <i>Topological Confinement in Skyrme Holography</i> , ECT Workshop "Gauge Topology, Flux Tubes and Holographic Models: The Intricate Dynamics of QCD in Vacuum and Extreme Environments", ECT, Trento, Italy (online).
May 24 <sup>th</sup>	Seminar talk: Relativistic spin hydrodynamics with torsion, Theory Seminar TPIII, Würzburg University, Germany (in-person).

May 12 <sup>th</sup>	Seminar talk: Quantum dynamics far from equilibrium in strong magnetic fields, Theory Seminar, Helmholtz Zentrum Dresden Rossendorf, Germany (in-person).
Apr 12 <sup>th</sup>	Seminar talk: Quantum Dynamics far from Equilibrium, Instytut Fizyki Teoretycznej, Wydział Fizyki i Astronomii, Uniwersytet Wrocławski, Wrocław, Poland (in-person).
Mar 18 <sup>th</sup>	Seminar talk: Energy dependence of the chiral magnetic effect in expanding holographic plasma, Universitat de Barcelona, Barcelona, Spain (inperson).
Mar 15 <sup>th</sup>	Conference talk: Magnetic effects in thermodynamics, hydrodynamics, and holography, Conference "AdS4CME @ HIC", Instituto de Física Teórica UAM-CSIC, Madrid, Spain (in-person).
2021	
Nov 22 <sup>nd</sup>	Seminar talk: Relativistic spin hydrodynamics with torsion, Seminar Channel: "The Dual Mysteries of Gauge Theories and Gravity", IIT Madras, India (online).
Nov 10 <sup>th</sup>	Seminar talk: Chiral hydrodynamics of plasmas in strong magnetic fields, Wrocław Tech, Wrocław, Poland (online).
Nov 4 <sup>th</sup>	Conference talk: Chiral Magnetic Effect in Holography , 6th International Conference on Chirality, Vorticity and Magnetic Field in Heavy Ion Collisions Stony Brook University, NY, USA (online).
Oct 5 <sup>th</sup>	Seminar talk: <i>Inverted c-functions in thermal states</i> , University of Victoria, BC, Canada (online).
Sep 2 <sup>nd</sup>	Conference talk: <i>Inverted c-functions in thermal states</i> , DPG-Tagung 2021, German Physical Society Meeting (online).
$\mathrm{Mar}\ 23^{\mathrm{rd}}$	Seminar talk: Chiral hydrodynamics of plasmas in strong magnetic fields, Institut für Theoretische Physik, Goethe-Universität Frankfurt (online).
Mar 18 <sup>th</sup>	Seminar talk: Chiral hydrodynamics of plasmas in strong magnetic fields, University of Ljubljana, Slovenia (online).
Jan 28 <sup>th</sup>	Seminar talk: Chiral hydrodynamics of plasmas in strong magnetic fields, Universiteit Utrecht, Utrecht, Netherlands (online).

## CONFERENCE ORGANIZATION SINCE 2020

2025 Holographic perspectives on chiral transport and spin dynamics, ECT\*,

Trento, Italy; co-organizers: U. Gursov (Utrecht), D. Kharzeev (Stony

Brook), K. Landsteiner (IFT Madrid).

2024

Apr 8-12 Entanglement, thermalization, and holography, Simons Center, Stony

Brook University, U.S.A.; co-organizers: N. Klco (Duke), B. Mueller (Duke), A. Schaefer (Regensburg), S. Waeber (Technion), L. Yaffe (U

Washington).

2023

Mar 13-17 Holographic perspectives on chiral transport, ECT\*, Trento, Italy; co-

organizers: U. Gursoy (Utrecht), D. Kharzeev (Stony Brook), K. Land-

steiner (IFT Madrid).

2022

Oct 24-28 HIPSTARS 2022 - Workshop on Heavy Ion Physics and Compact Stars,

ICIMAF, Havana, Cuba.

**2020**—**present** HoloTube: Co-founded and organized the acclaimed international online

seminar series and first network of webinars on Applied Holography.