

## Curriculum Vitæ

Jun. Prof. Dr. Sören Schlichting  
Universität Bielefeld  
Universitätsstr. 25  
D-33615 Bielefeld, Germany

Born in Frankfurt a.M., Germany, July 26<sup>th</sup> 1987  
Citizenship: Germany    Marital Status: Unmarried

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## RESEARCH INTERESTS

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HIGH ENERGY NUCLEAR THEORY    Heavy-ion collision: Early time dynamics & Thermalization process,  
Electromagnetic and Hard probes, Small systems (p/d+A),  
Chiral Magnetic Effect and anomalous transport, Critical point search  
Nucleon structure: Small-x physics & gluon saturation, GPDs & TMDs

NON-EQUILIBRIUM FIELD THEORY    Development and applications of real-time lattice/functional methods  
Universal dynamics far from equilibrium and wave turbulence  
Dynamic critical phenomena and non-equilibrium phase transitions

## PROFESSIONAL EXPERIENCE

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SEP 2018 – present    *(W1) Junior Professor (tenure track W3)*  
**Universität Bielefeld**, Bielefeld, Germany  
Theoretical Physics

SEP 2016 – SEP 2018    *Research Assistant Professor*  
**University of Washington**, Seattle, WA United States  
Nuclear Theory Group

JAN 2014 – SEP 2016    *Goldhaber Distinguished Fellow*  
OCT 2013 – DEC 2013    *Postdoctoral Research Associate*  
**Brookhaven National Laboratory**, Upton, NY United States  
Nuclear Theory Group

## ACADEMIC TRAINING

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OCT 2011 – AUG 2013    *Ph.D., Physics (summa cum laude)*  
**Universität Heidelberg**, Heidelberg, Germany  
Supervisor: Prof. Jürgen Berges  
Thesis title: “*Non-equilibrium dynamics and thermalization of weakly coupled non-abelian plasmas*”

OCT 2010 – SEPT 2011    *Ph.D., Physics (continued in Heidelberg)*  
**Technische Universität Darmstadt**, Darmstadt, Germany  
Supervisor: Prof. Jürgen Berges

SEPT 2009 – AUG 2010    *M.Sc., Physics*  
**Michigan State University**, East Lansing, MI United States  
Supervisor: Prof. Scott Pratt  
Thesis title: “*Charge conservation in RHIC and contributions to local parity violation observables*”

OCT 2006 – AUG 2009    *B.Sc., Physics (with distinction)*  
**Technische Universität Darmstadt**, Darmstadt, Germany  
Supervisor: Prof. Jürgen Berges  
Thesis title: “*Dynamic critical phenomena from the lattice*”

## AWARDS

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2014– 2016	<b>Goldhaber Distinguished Fellowship</b> (\$20k salary bonus plus \$12k travel/material funds per year)
2011– 2013	<b>HGS-HIRe for FAIR Fellowship</b> (EUR 1k travel funds per year)
2007 – 2010	<b>Studienstiftung des dt. Volkes Scholarship</b> (EUR 1.8k scholarship per year)

## FUNDING

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MAY 2019– JUN 2021	<b>Principal Investigator</b> Collaborative Research Center CRC-TR-211 “Strong-Interaction Matter under Extreme Conditions” Project B08 – <i>Non-equilibrium QCD in nuclear collisions</i> (1 Post-Doc & 1 PhD position, total 249.3k EUR)
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## TEACHING EXPERIENCE

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### COURSES

**Undergraduate Lecturer**, Universität Bielefeld  
“*Mathematical Methods of Physics*” (Winter 2019/2020)

**Graduate Lecturer**, Universität Bielefeld  
“*Non-equilibrium physics*” (Winter 2018/2019, Winter 2020/2021)

**Summer School Lecturer**, Bengaluru, India  
ICTS/TIFR School “The myriad colorful ways of understanding extreme QCD matter”  
“*Non-equilibrium QCD on the lattice*” (5 lectures in Summer 2019)

### ORGANIZATION OF STUDENT SEMINARS

**Graduate Seminar**, Universität Bielefeld  
“*Thermalization of the Early Universe*” (Summer 2020)

**Group Seminar**, Universität Bielefeld  
“*Non-equilibrium QCD*” (Winter 2018/2019, Summer 2019, Winter 2019/2020, Summer 2020, Winter 2020/2021)

### SUPERVISION OF PHD, MSc AND BSc STUDENTS

**Doctoral Thesis Supervisor**, Universität Bielefeld  
Student: *Pragya Singh* (Winter 2018/2019 – present)  
Thesis title: “*Early time dynamics & longitudinal structure of high-energy Heavy-Ion collisions*”

Student: *Ismail Soudi* (Winter 2018/2019 – present)  
Thesis title: “*Jet quenching & chemical equilibration of jets in the QGP*”

Student: *Clemens Werthmann* (Summer 2019 – present)  
Thesis title: “*Linearized QCD Kinetic description of small systems*”

Student: *Stephan Ochsenfeld* (Winter 2020/2021– present)  
Thesis title: “*Hydrodynamic and non-hydrodynamic excitations of the QGP*”

Student: *Philip Plaschke* (Winter 2020/2021 – present)  
Thesis title: “*Pre-equilibrium photon and dilepton production in Heavy-Ion collisions*”

**M.Sc. Thesis Supervisor**, Universität Bielefeld

Student: *Frederic Klette* (Winter 2019 – present)

Thesis title: “*Evading the sign problem in real-time QFT*”

Student: *Stephan Ochsenfeld* (Winter 2019 – Summer 2020)

Thesis title: “*Exploring the pre-equilibrium dynamics of longitudinal fluctuations in high-energy Heavy-Ion collisions*”

Student: *Philip Plaschke* (Winter 2019 – Summer 2020)

Thesis title: “*Non-equilibrium transport of conserved charges in high-energy Heavy-Ion collisions*”

Student: *Miriam Meier* (Winter 2018 – present)

Thesis title: “*Effects of a QCD medium on the probability of high-energy gluon Bremsstrahlung*”

**B.Sc. Thesis Supervisor**, Universität Bielefeld

Student: *Sven Huelsmann* (Winter 2019/2020)

Thesis title: “*Functional Renormalization Group Approach to Real Time Correlation Functions of the Anharmonic Oscillator*”

Student: *Mika Sebastian Spier* (Summer 2020)

Thesis title: “*Spectral functions from the real-time FRG approach for asymmetric potentials*”

Student: *Patrick Niekamp* (Summer 2020)

Thesis title: “*Solutions to the relativistic Couette flow*”

Student: *Yannik Hoffmann* (Summer 2020)

Thesis title: “*Initial state energy deposition in heavy-ion collisions within a small- $x$  TMD approach*”

## PROFESSIONAL SERVICES

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### Referee

American Physical Society’s journals: **Phys. Rev. Lett.**, **Phys. Rev. C**, **Phys. Rev. D**

Elsevier’s journals: **Phys. Lett. A**, **Phys. Lett. B**, **Nucl. Phys. A**, **Annals of Physics**

Springer’s journal: **Centr. Eur. J. Phys.**

### Grant reviewer

National Science Center Poland

### Conference & Workshop organization

Organizer of ECT\* Program “Saturation and Diffraction at the LHC and EIC”

Organizer & Diversity coordinator for 2019 INT Program “Origins of Correlations in High Energy Collisions”

Member of International Advisory Committee for 2019 INT Program “Quantum Turbulence: Cold Atoms, Heavy Ions, and Neutron Stars”

Session organizer at 2015,2016 & 2018 RHIC/AGS Users meeting

### Seminar organization

Co-Organizer of Bielefeld CRC-TR 211 seminar (SEP 2018 – present )

Co-Organiser of Bielefeld Mathematical Physics Colloquium (MAR 2020 – OCT 2020)

Organizer of UW Nuclear Theory Brown-Bag seminar (OCT 2016 – SEP 2018 )

Chair of BNL Nuclear Theory seminar committee (OCT 2014 – SEPT 2016)

### Member of ”Chiral magnetic effect in heavy-ion collisions” task-force

Contributed to critical assessment of present status and recommendations for future strategies

at the request of BNL Assoc. Lab Director B. Mueller (c.f. task-force report V. Koch et al., Chin.Phys. C41 (2017) no.7, 072001)

### Contributor to U.S. DOE Exascale Requirements Review for Nuclear Physics

Contributed case study for Hot-QCD sub-panel

## OUTREACH

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JAN 2020    **Public lecture**, Universität Bielefeld  
“*Quarks & Gluonen – Extreme Formen von Materie bei 180000000000 Celsius*”

## SELECTED PUBLICATIONS

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- “*Hydrodynamic attractors, initial state energy and particle production in relativistic nuclear collisions,*”  
G. Giacalone, A. Mazeliauskas and S. Schlichting,  
Phys. Rev. Lett. 123, no. 26, 262301 (2019).
- “*Matching the non-equilibrium initial stage of heavy ion collisions to hydrodynamics with QCD kinetic theory*”  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
Phys. Rev. Lett. 122, no. 12, 122302 (2019)
- “*Chiral magnetic effect and anomalous transport from real-time lattice simulations*”  
N. Mueller, S. Schlichting and S. Sharma  
Phys. Rev. Lett. 117, no. 14, 142301 (2016)
- “*Universality far from equilibrium: From superfluid Bose gases to heavy-ion collisions*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
Phys. Rev. Lett. 114, 6, 061601 (2015)
- “*The shape of the proton at high energies*”  
S. Schlichting and B. Schenke  
Phys. Lett. B 739, 313 (2014)
- “*Turbulent thermalization process in heavy-ion collisions at ultrarelativistic energies*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
Phys. Rev. D 89, 7, 074011 (2014)

# COMPLETE LIST OF PUBLICATIONS

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## PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. “*3-D structure of the Glasma initial state – Breaking boost-invariance by collisions of extended shock waves in classical Yang-Mills theory*”  
S. Schlichting and P. Singh,  
**Phys. Rev. D** 103, no.1, 014003 (2021)
2. “*Spectral functions from the real-time functional renormalization group*”  
S. Huelsmann, S. Schlichting and P. Scior,  
**Phys. Rev. D** 102, no.9, 096004 (2020)
3. “*Spectral functions and dynamic critical behavior of relativistic  $Z_2$  theories*”  
D. Schweitzer, S. Schlichting and L. von Smekal,  
**Nucl. Phys. B** 960, 115165 (2020)
4. “*Hydrodynamization and nonequilibrium Green’s functions in kinetic theory*”  
S. Kamata, M. Martinez, P. Plaschke, S. Ochsensfeld and S. Schlichting,  
**Phys. Rev. D** 102, no.5, 056003 (2020)
5. “*Saturation corrections to dilute-dense particle production and azimuthal correlations in the Color Glass Condensate*”  
S. Schlichting and V. Skokov,  
**Phys. Lett. B** 806, 135511 (2020)
6. “*Chiral instabilities & the onset of chiral turbulence in QED plasmas*”  
M. Mace, N. Mueller, S. Schlichting and S. Sharma,  
**Phys. Rev. Lett.** 124, no.19, 191604 (2020)
7. G. Giacalone, A. Mazeliauskas and S. Schlichting,  
“*Hydrodynamic attractors, initial state energy and particle production in relativistic nuclear collisions,*”  
**Phys. Rev. Lett.** 123, no. 26, 262301 (2019).
8. “*Spectral functions and critical dynamics of the  $O(4)$  model from classical-statistical lattice simulations,*”  
S. Schlichting, D. Smith and L. von Smekal,  
**Nucl. Phys. B** 950, 114868 (2020).
9. “*Spacetime picture of baryon stopping in the color-glass condensate,*”  
L. D. McLerran, S. Schlichting and S. Sen,  
**Phys. Rev. D** 99, no. 7, 074009 (2019).
10. “*Universal quark to gluon ratio in medium-induced parton cascade,*”  
Y. Mehtar-Tani and S. Schlichting,  
**JHEP** 1809, 144 (2018).
11. “*Matching the non-equilibrium initial stage of heavy ion collisions to hydrodynamics with QCD kinetic theory*”  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
**Phys. Rev. Lett.** 122, no. 12, 122302 (2019)
12. “*Effective kinetic description of event-by-event pre-equilibrium dynamics in high-energy heavy-ion collisions*”  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
**Phys. Rev. C** 99, no.3, 034910 (2019)
13. “*Off-equilibrium infrared structure of self-interacting scalar fields: Universal scaling, Vortex-antivortex superfluid dynamics and Bose-Einstein condensation,*”  
J. Deng, S. Schlichting, R. Venugopalan and Q. Wang,  
**Phys. Rev. A** 97, no. 5, 053606 (2018)

14. “*Linearly polarized gluons and axial charge fluctuations in the Glasma,*”  
T. Lappi and S. Schlichting,  
**Phys. Rev. D** 97, no. 3, 034034 (2018)
15. “*Importance of initial and final state effects for azimuthal correlations in p+Pb collisions,*”  
M. Greif, C. Greiner, B. Schenke, S. Schlichting and Z. Xu,  
**Phys. Rev. D** 96, no. 9, 091504 (2017)
16. “*Predictions for Cold Nuclear Matter Effects in p+Pb Collisions at  $\sqrt{s_{NN}} = 8.16$  TeV,*”  
J. L. Albacete *et al.*,  
**Nucl. Phys. A** 972, 18 (2018)
17. “*Universal self-similar scaling of spatial Wilson loops out of equilibrium,*”  
J. Berges, M. Mace and S. Schlichting  
**Phys. Rev. Lett.** 118, no. 19, 192005 (2017)
18. “*Non-equilibrium study of the chiral magnetic effect from real-time simulations with dynamical fermions,*”  
M. Mace, N. Mueller, S. Schlichting and S. Sharma,  
**Phys. Rev. D** 95, no. 3, 036023 (2017)
19. “*Status of the chiral magnetic effect and collisions of isobars*”  
V. Koch, S. Schlichting, V. Skokov, P. Sorensen, J. Thomas, S. Voloshin, G. Wang and H. U. Yee,  
**Chin. Phys. C** 41, no.7, 072001 (2017)
20. “*Mass ordering of spectra from fragmentation of saturated gluon states in high multiplicity proton-proton collisions,*”  
B. Schenke, S. Schlichting, P. Tribedy and R. Venugopalan,  
**Phys. Rev. Lett.** 117, no. 16, 162301 (2016)
21. “*Chiral magnetic effect and anomalous transport from real-time lattice simulations*”  
N. Mueller, S. Schlichting and S. Sharma  
**Phys. Rev. Lett.** 117, no. 14, 142301 (2016)
22. “*3-D Glasma initial state for relativistic heavy ion collisions*”  
B. Schenke and S. Schlichting,  
**Phys. Rev. C** 94, 044907 (2016)
23. “*Off-equilibrium sphaleron transitions in the Glasma*”  
M. Mace, S. Schlichting and R. Venugopalan,  
**Phys. Rev. D** 93, 7, 074036 (2016)
24. “*Tracing the origin of azimuthal gluon correlations in the color glass condensate*”  
T. Lappi, B. Schenke, S. Schlichting and R. Venugopalan  
**JHEP** 1601, 061 (2016)
25. “*Nonequilibrium fixed points in longitudinally expanding scalar theories: infrared cascade, Bose condensation and a challenge for kinetic theory*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
**Phys. Rev. D** 92, 9, 096006 (2015)
26. “*Azimuthal anisotropies in p+Pb collisions from classical Yang-Mills dynamics*”  
B. Schenke, S. Schlichting and R. Venugopalan  
**Phys. Lett. B** 747, 76 (2015)
27. “*Universality far from equilibrium: From superfluid Bose gases to heavy-ion collisions*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
**Phys. Rev. Lett.** 114, 6, 061601 (2015)

28. “*The shape of the proton at high energies*”  
S. Schlichting and B. Schenke  
**Phys. Lett. B** 739, 313 (2014)
29. “*Basin of attraction for turbulent thermalization and the range of validity of classical-statistical simulations*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
**JHEP** 1405, 054 (2014)
30. “*Universal attractor in a highly occupied non-Abelian plasma*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
**Phys. Rev. D** 89, 11, 114007 (2014)
31. “*Turbulent thermalization process in heavy-ion collisions at ultrarelativistic energies*”  
J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan  
**Phys. Rev. D** 89, 7, 074011 (2014)
32. “*The non-linear Glasma*”  
J. Berges and S. Schlichting  
**Phys. Rev. D** 87, 1, 014026 (2013)
33. “*Turbulent thermalization of weakly coupled non-abelian plasmas*”  
S. Schlichting  
**Phys. Rev. D** 86, 065008 (2012)
34. “*Over-populated gauge fields on the lattice*”  
J. Berges, S. Schlichting and D. Sexty  
**Phys. Rev. D** 86, 074006 (2012)
35. “*Nonlinear amplification of instabilities with longitudinal expansion*”  
J. Berges, K. Boguslavski and S. Schlichting  
**Phys. Rev. D** 85, 076005 (2012)
36. “*Out of equilibrium dynamics of coherent non-abelian gauge fields*”  
J. Berges, S. Scheffler, S. Schlichting and D. Sexty  
**Phys. Rev. D** 85, 034507 (2012)
37. “*Effects of Momentum Conservation and Flow on Angular Correlations at RHIC*”  
S. Pratt, S. Schlichting and S. Gavin  
**Phys. Rev. C** 84, 024909 (2011)
38. “*Charge conservation at energies available at the BNL Relativistic Heavy Ion Collider and contributions to local parity violation observables*”  
S. Schlichting and S. Pratt  
**Phys. Rev. C** 83, 014913 (2011)
39. “*Dynamic critical phenomena from spectral functions on the lattice*”  
J. Berges, S. Schlichting and D. Sexty  
**Nucl. Phys. B** 832, 228-240 (2010)

## PRE-PRINTS

1. “*Hot spots and gluon field fluctuations as causes of eccentricity in small systems*”  
S. Demirci, T. Lappi and S. Schlichting,  
arXiv:2101.03791 [hep-ph] (submitted to Phys. Rev. D).
2. “*Equilibration of weakly coupled QCD plasmas*”  
X. Du and S. Schlichting,  
arXiv:2012.09079 [hep-ph] (submitted to Phys. Rev. D).

3. “*Equilibration of the Quark-Gluon Plasma at finite net-baryon density in QCD kinetic theory*”  
X. Du and S. Schlichting,  
arXiv:2012.09068 [hep-ph] (submitted to Phys. Rev. Lett.)
4. “*Hadronization of correlated gluon fields*”  
M. Greif, C. Greiner, S. Plätzer, B. Schenke and S. Schlichting,  
arXiv:2012.08493 [hep-ph] (submitted to Phys. Rev. D).
5. “*Fragmentation and equilibration of jets in a QCD plasma*”  
S. Schlichting and I. Soudi,  
arXiv:2008.04928 [hep-ph] (submitted to JHEP).

#### INVITED REVIEWS IN PEER-REVIEWED JOURNALS

1. “*The First fm/c of Heavy-Ion Collisions*”  
S. Schlichting and D. Teaney,  
**Ann. Rev. Nucl. Part. Sci.** 69, 447 (2019).
2. “*Collectivity in Small Collision Systems: An Initial-State Perspective*”  
S. Schlichting and P. Tribedy  
**Adv. High Energy Phys.** 2016, 8460349 (2016)

#### CONFERENCE PROCEEDINGS IN PEER-REVIEWED JOURNALS

1. “*Kinetic and Chemical Equilibration of Quark-Gluon Plasma*”  
X. Du and S. Schlichting,  
arXiv:2010.13488 [hep-ph] to appear in PoS HardProbes (Hard Probes 2020)
2. “*Energy loss and equilibration of jets in a QCD plasma*”  
S. Schlichting and I. Soudi,  
arXiv:2009.02973 [hep-ph] to appear in PoS HardProbes (Hard Probes 2020)
3. “*Chirality transfer & chiral turbulence in gauge theories*”  
M. Mace, N. Mueller, S. Schlichting and S. Sharma,  
**Nucl. Phys. A** 1005, 121874 (2021) (Quark Matter 2019)
4. “*Matching the non-equilibrium initial stage of heavy ion collisions to hydrodynamics with QCD kinetic theory*”  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
**PoS Confinement** 2018, 152 (2019). (Confinement 2018)
5. “*Importance of initial and final state effects for azimuthal correlations in p+Pb collisions,*”  
M. Greif, C. Greiner, B. Schenke, S. Schlichting and Z. Xu,  
**Nucl. Phys. A** 982, 491 (2019) (Quark Matter 2018)
6. “*Jet fragmentation in a QCD medium: Universal quark/gluon ration and Wave turbulence*”  
Y. Mehtar-Tani and S. Schlichting,  
**PoS HardProbes** 2018, 093 (2018) (Hard Probes 2018)
7. “*Early time dynamics and hard probes in heavy-ion collisions,*”  
S. Schlichting,  
**PoS HardProbes** 2018, 033 (2019) (Hard Probes 2018)
8. “*Hadronic observables in p+p and d+Au collisions at RHIC using CGC+PYTHIA,*”  
B. Schenke, S. Schlichting, P. Tribedy and R. Venugopalan,  
**Nucl. Phys. A** 982, 263 (2019) (Quark Matter 2018)

9. *"2+1D simulations of pre-equilibrium stage with QCD kinetic theory"*  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
**PoS HardProbes2018**, 111 (2018) (Hard Probes 2018)
10. *"Collectivity in small systems - Initial state vs. final state effects"*  
M. Greif, C. Greiner, B. Schenke, S. Schlichting and Z. Xu,  
**EPJ Web Conf.** 172, 05007 (2018) (ISMD 2017)
11. *"Initial conditions for hydrodynamics from kinetic theory equilibration"*  
A. Kurkela, A. Mazeliauskas, J. F. Paquet, S. Schlichting and D. Teaney,  
**Nucl. Phys. A** 967 (2017) 289-292 (Quark Matter 2017)
12. *"Simulating chiral magnetic effect and anomalous transport phenomena in the pre-equilibrium stages of heavy-ion collisions"*  
M. Mace, N. Mueller, S. Schlichting and S. Sharma,  
**Nucl. Phys. A** 967 (2017) 752-755 (Quark Matter 2017)
13. *"3-D Glasma initial state from small-x evolution"*  
B. Schenke and S. Schlichting,  
**Nucl. Phys. A** 967 (2017) 285-288 (Quark Matter 2017)
14. *"Initial state and pre-equilibrium effects in small systems"*  
S. Schlichting  
**Nucl. Phys. A** 956, 216 (2016) (Quark Matter 2015)
15. *"Turbulent thermalization process in high-energy heavy-ion collisions"*  
J. Berges, B. Schenke, S. Schlichting and R. Venugopalan  
**Nucl. Phys. A** 931, 348 (2014) (Quark Matter 2014)

## LIST OF PRESENTATIONS (SINCE 2013)

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### PRESENTATIONS AT MAJOR INTERNATIONAL CONFERENCES & SOCIETY MEETINGS

NOV 2019	<b>Quark Matter 2019</b> Contributed talk <i>“Chirality transfer &amp; Chiral turbulence in gauge theories”</i>	Wuhan, China
JUN 2019	<b>Quantum Systems under Extreme Conditions (QSEC) 2019</b> Contributed talk <i>“Chiral turbulence in spin-polarized QED plasmas”</i>	Heidelberg, Germany
JUN 2019	<b>Initial Stages 2019</b> Invited plenary talk <i>“Initial stages of high-energy heavy-ion collisions – Theory Overview”</i>	New York (NY), United States
MAR 2019	<b>German Physical Society – Spring meeting</b> Invited plenary talk <i>“Non-equilibrium dynamics of high-energy heavy-ion collisions”</i>	Munich, Germany
OCT 2018	<b>Hard Probes 2018</b> Invited plenary talk <i>“Early time dynamics and hard probes in heavy-ion collisions”</i> Parallel talk <i>“Universal <math>q/g</math> ratio in medium induced parton cascade”</i>	Aix-les-Bains, France
MAY 2018	<b>xQCD 2018</b> Contributed talk <i>“Jet fragmentation in a QCD medium”</i>	Frankfurt a.M., Germany
SEPT 2017	<b>ISMD 2017</b> Invited talk <i>“Collectivity in small systems”</i>	Tlaxcala, Mexico
AUG 2017	<b>Critical point and onset of deconfinement 2017</b> Invited plenary talk <i>“Chiral magnetic effect &amp; anomalous transport in real-time”</i>	Stonybrook (NY), United States
JUN 2017	<b>RHIC AGS Users Meeting 2017</b> Invited plenary talk <i>“Chiral magnetic effect &amp; Early time dynamics”</i>	Upton (NY), United States
FEB 2017	<b>APS Topical Group on Hadronic Physics (GHP) meeting</b> Invited plenary talk <i>“Recent developments in Heavy-Ion Theory”</i>	Washington D.C., United States
FEB 2017	<b>Quark Matter 2017</b> Parallel talk <i>“3-D Glasma initial state from small-<math>x</math> evolution”</i>	Chicago (IL), United States
OCT 2016	<b>APS Division of Nuclear Physics (DNP) meeting</b> Contributed talk <i>“Chiral magnetic effect &amp; anomalous transport from real-time lattice simulations”</i>	Vancouver (BC), Canada
NOV 2016	<b>Physics Opportunities at an Electron Ion Collider VII</b>	Philadelphia (PA), United States

	Invited parallel talk <i>“Azimuthal correlations in <math>p+p/A</math> &amp; relations to nucleon structure”</i>	
SEP 2016	<b>Quark confinement and the Hadron Spectrum</b> Invited parallel talk <i>“Initial state and pre-equilibrium effects in small systems”</i> Plenary flash talk <i>“Chiral magnetic effect &amp; anomalous transport from real-time lattice simulations”</i>	Thessaloniki, Greece
MAY 2016	<b>Initial Stages in High-Energy Nuclear Collisions</b> Invited plenary talk <i>“Equilibration process in weak-coupling approaches“</i>	Lisbon, Portugal
OCT 2015	<b>Quark Matter 2015</b> Invited plenary talk <i>“Initial state and pre-equilibrium effects in small systems”</i>	Kobe, Japan
DEC 2014	<b>Initial Stages in High-Energy Nuclear Collisions</b> Invited parallel talk <i>“The shape of the proton at high energies”</i>	Napa (CA), United States
SEP 2014	<b>Physics Opportunities at an Electron Ion Collider V</b> Invited parallel talk <i>“Theory puzzles in <math>p+A</math> and <math>A+A</math> collisions”</i>	New Haven (CT), United States
JUL 2014	<b>Strong and Electro-Weak Matter 2014</b> Invited plenary talk <i>“Thermalization process in weakly coupled field theories far from equilibrium”</i>	Lausanne, Switzerland
MAY 2014	<b>Quark Matter 2014</b> Parallel talk <i>“Turbulent thermalization process in high-energy heavy-ion collisions”</i>	Darmstadt, Germany
MAR 2014	<b>German Physical Society – Spring meeting</b> Invited plenary talk at Dissertation Award Symposium <i>“Turbulent thermalization process in high-energy heavy-ion collisions”</i>	Mainz, Germany
MAR 2013	<b>German Physical Society – Spring meeting</b> Parallel talk <i>“Thermalization of weakly coupled non-abelian plasmas”</i>	Dresden, Germany

## PRESENTATIONS AT WORKSHOPS

DEC 2020	<b>Max Planck Institute for Gravitational Physics, Potsdam</b> Workshop on “Relativistic Hydrodynamics: Foundations, Novel Applications & Interdisciplinary connections” <i>“Non-equilibrium Green’s functions of the energy momentum tensor”</i>	Online
DEC 2020	<b>Zimanyi School</b> <i>“Chiral magnetic effect &amp; anomalous transport in real-time”</i>	Online

OCT 2020	<b>ICTS/TIFR</b> Workshop on "Extreme Nonequilibrium QCD" <i>"Equilibration of the QGP and its phenomenological consequences"</i>	Online
OCT 2020	<b>ALICE 3 workshop</b> <i>"Pre-equilibrium dilepton production"</i>	Online
SEP 2020	<b>ALICE FSP meeting</b> <i>"Fluctuations and correlations of conserved charged in- and out-of-equilibrium"</i>	Online
DEC 2019	<b>Universitaet Paderborn</b> High-performance computing meeting "PC2 Users Meeting" <i>"Early time dynamics of Heavy-Ion Collisions"</i>	Paderborn, Germany
NOV 2019	<b>CCNU</b> Workshop on "Contemporary QCD Physics and Relativistic Nuclear Collisions" <i>"Hydrodynamic attractors and entropy production in Heavy-Ion Collisions"</i>	Wuhan, China
MAY 2019	<b>Institute for Nuclear Theory</b> Workshop on "Origins of correlations in High-Energy Collisions" <i>"Collectivity in small systems – Initial state vs. final state effects"</i>	Seattle (WA), United States
NOV 2018	<b>Institute for Nuclear Theory</b> Workshop on "Probing Nucleons and Nuclei in High Energy Collisions" <i>"De-correlation of di-jets in p+A collisions"</i>	Seattle (WA), United States
SEP 2018	<b>Institute for Nuclear Theory</b> Workshop on "Advances in Monte Carlo Techniques for Many-Body Quantum Systems" <i>"Dynamic critical phenomena from real-time spectral functions on the lattice"</i>	Seattle (WA), United States
JUL 2018	<b>RIKEN BNL Research Center</b> Workshop on "Probing Quark-Gluon Matter with Jets" <i>"Universal q/g ratio in medium induced parton cascade"</i>	Upton (NY), United States
JAN 2018	<b>Jets and heavy-flavor workshop</b> <i>"Equilibration of the QGP and connections to jet physics"</i>	Santa-Fe (NM), United States
OCT 2017	<b>QCD challenges from pp to AA</b> <i>"Non-equilibrium dynamics in AA collisions"</i>	Puebla, Mexico
APR 2017	<b>RIKEN BNL Research Center</b> Workshop on "Saturation: Recent Developments, New Ideas & Measurements" <i>"Event-by-event pre-equilibrium dynamics"</i>	Upton (NY), United States
FEB 2017	<b>RIKEN BNL Research Center</b> Workshop on "QCD in finite temperature and heavy-ion collisions"	Upton (NY), United States

*“Chiral magnetic effect & anomalous transport from real-time lattice simulations”*

OCT 2016	<b>Institute for Nuclear Theory</b> Workshop on ”Exploring the QCD Phase Diagram through Energy Scans” <i>“Sphaleron transitions &amp; Chiral Magnetic Effect out-of-equilibrium”</i>	Seattle (WA), United States
AUG 2015	<b>CERN-TH Institute</b> Workshop on ”Non-equilibrium dynamics in heavy-ion collisions and cosmology” <i>“Non-equilibrium dynamics of topological transitions and axial charges”</i>	Geneva, Switzerland
JUN 2016	<b>Exascale Requirements Review for Nuclear Physics</b> <i>“Hot QCD Case study: Computational demands for non-equilibrium QCD“</i>	Gaithersburg (MD), United States
FEB 2016	<b>QCD Chirality Workshop 2016</b> <i>“ Non-equilibrium dynamics of topological transitions and axial charges ”</i>	UCLA (CA), United States
JAN 2016	<b>RIKEN BNL Research Center</b> Workshop on ”Exploring the longitudinal dynamics in heavy-ion collisions” <i>“Isotropization in heavy-ion collisions”</i>	Upton (NY), United States
AUG 2015	<b>Institute for Nuclear Theory</b> Workshop on ”Equilibration Mechanisms in Weakly and Strongly Coupled Quantum Field Theory” <i>“Thermalization process in far-from equilibrium systems”</i>	Seattle (WA), United States
JUL 2015	<b>Institute for Nuclear Theory</b> Workshop on ”Correlations and Fluctuations in p+A and A+A Collisions” <i>“Initial state and pre- equilibrium effects in p+A collisions”</i>	Seattle (WA), United States
JUN 2015	<b>Kavli Institute of Theoretical Physics China</b> Workshop on ”sQGP and extreme QCD” <i>“Initial state and pre- equilibrium effects in p+A collisions”</i>	Beijing, China
MAY 2015	<b>Kavli Institute of Theoretical Physics China</b> Workshop on ”sQGP and extreme QCD” <i>“Dynamic critical phenomena from real-time spectral functions on the lattice”</i>	Beijing, China
MAY 2015	<b>Kavli Institute of Theoretical Physics China</b> Workshop on ”sQGP and extreme QCD” <i>“Thermalization process in far- from equilibrium systems”</i>	Beijing, China
MAR 2015	<b>RIKEN BNL Research Center</b> Workshop on ”Collectivity in small systems” <i>“Initial state and azimuthal correlations in p+A”</i>	Upton (NY), United States

FEB 2015	<b>RIKEN BNL Research Center</b> Brain circulation Workshop <i>"Thermalization process in heavy-ion collisions"</i>	Upton (NY), United States
DEC 2014	<b>ExtreMe Matter Institute</b> Workshop on "Many-body QCD confronts heavy-ion experiments" <i>"Initial state and thermalization in p+A and A+A"</i>	Heidelberg, Germany
JUL 2014	<b>Mainz Institute for Theoretical Physics</b> Workshop on "Jets & Particle production" <i>"Thermalization process on the lattice"</i>	Mainz, Germany
APR 2014	<b>QuantMat 2014 @ CUNY</b> Workshop on "Disorder, Quenches, Simulations & Experiments" <i>"Turbulent thermalization process in heavy-ion collisions"</i>	New York City (NY), United States
APR 2014	<b>RIKEN BNL Research Center</b> Workshop on "Approach to Equilibrium in Strongly Interacting Matter" <i>"Turbulent thermalization process in high-energy heavy-ion collisions"</i>	Upton (NY), United States
JUN 2013	<b>ECT* Trento</b> Workshop on "High energy, High density and Hot QCD" <i>"Turbulent thermalization of the Quark Gluon Plasma"</i>	Trento, Italy
FEB 2013	<b>51. Schladming Winter School</b> <i>"Non-equilibrium dynamics of weakly coupled non-abelian plasmas"</i>	Schladming, Austria

#### INVITED SEMINAR TALKS & COLLOQUIA

DEC 2020	<b>ICTS/TIFR</b> String Seminar (online)	Bangalore, India
NOV 2020	<b>Bergen University</b> Heavy-Ion Seminar (online)	Bergen, Norway
OCT 2020	<b>Stony Brook University</b> Nuclear Theory Seminar (online)	Stony Brook (NY), United States
OCT 2020	<b>LBNL</b> Nuclear Theory Seminar (online)	Berkley (CA), Germany
SEP 2020	<b>Arizona State University</b> Theoretical Physics Colloquium (online)	Tempe (AZ), United States
JUN 2020	<b>University of Heidelberg</b> Theoretical Physics Seminar (online)	Heidelberg, Germany
APR 2020	<b>University of Washington</b> INT S@INT Seminar (online)	Seattle (WA), United States
DEC 2019	<b>Universität Muenster</b> Nuclear Physics Colloquium	Muenster, Germany
AUG 2019	<b>GSI</b> GSI/FAIR Symposium on QCD and Hadron Physics	Darmstadt, Germany

AUG 2019	<b>Brookhaven National Lab</b> Nuclear Theory Seminar	Upton (NY), United States
JAN 2019	<b>Universität Bielefeld</b> Physics Colloquium	Bielefeld, Germany
MAY 2018	<b>JLU Giessen</b> Nuclear Theory Seminar	Giessen, Germany
MAY 2018	<b>LBNL</b> Nuclear Theory Seminar	Berkley (CA), Germany
APR 2018	<b>NC State University</b> Nuclear Theory Seminar	Raleigh (NC), Germany
DEC 2017	<b>University of Heidelberg</b> IsoQuant Seminar	Heidelberg, Germany
DEC 2017	<b>University of Frankfurt</b> Nuclear Physics Colloquium	Frankfurt a.M., Germany
JUN 2017	<b>University of Stavanger</b> Nuclear Theory Seminar	Stavanger, Norway
MAY 2017	<b>CERN</b> CERN Heavy-Ion Forum	Geneva, Switzerland
APR 2017	<b>University of Kansas</b> Nuclear/Particle Physics Seminar	Lawrence (KS), United States
MAR 2017	<b>University of Connecticut</b> Particle/Astro/Nuclear Physics Seminar	Storrs (CT), United States
FEB 2017	<b>University of Maryland</b> Nuclear Theory Seminar	College Park (MD), United States
DEC 2016	<b>JLU Giessen</b> Nuclear Theory Seminar	Giessen, Germany
DEC 2016	<b>University of Heidelberg</b> IsoQuant Seminar	Heidelberg, Germany
SEP 2016	<b>University of Maryland</b> Nuclear Theory Seminar	College Park (MD), United States
JUN 2016	<b>Stony Brook University</b> Nuclear Theory Seminar	Stony Brook (NY), United States
MAY 2016	<b>Universität Bielefeld</b> High-Energy Physics Seminar	Bielefeld, Germany
APR 2016	<b>Vienna University of Technology</b> Nuclear Theory Seminar	Vienna, Austria
APR 2016	<b>Technical University Darmstadt</b> Theory Colloquium	Darmstadt, Germany
JAN 2016	<b>University of Washington</b> Nuclear Theory Seminar	Seattle (WA), United States
DEC 2015	<b>Jyvaskyla University</b> High-EnergyTheory Seminar	Jyvaskyla, Finland
DEC 2015	<b>Columbia University</b> Nuclear Theory Seminar	New York City (NY), United States

NOV 2015	<b>University of Connecticut</b> Nuclear Physics Seminar	Storrs (CT), United States
NOV 2015	<b>University of Maryland</b> Nuclear Theory Seminar	College Park (MD), United States
OCT 2015	<b>JLU Giessen</b> Nuclear Theory Seminar	Giessen, Germany
JUN 2015	<b>Chinese Academy of Sciences (IHEP)</b> High-Energy Physics Seminar	Beijing, China
APR 2015	<b>Stony Brook University</b> Nuclear Theory Seminar	Stony Brook (NY), United States
MAR 2015	<b>Massachusetts Institute of Technology</b> Nuclear & Particle Theory Seminar	Boston (MA), United States
JAN 2015	<b>McGill University</b> Nuclear Theory Seminar	Montreal, Canada
JAN 2015	<b>McGill University</b> High-Energy Theory Seminar	Montreal, Canada
APR 2014	<b>University of Illinois at Chicago</b> High-Energy Physics Seminar	Chicago (IL), United States
MAR 2014	<b>CEA Saclay</b> Nuclear Physics Seminar	Gif-sur-Yvette, France
MAR 2014	<b>Indiana University</b> Nuclear Physics Seminar	Bloomington (IN), United States
JAN 2014	<b>RIKEN BNL Research Center</b> Nuclear Theory seminar	Upton (NY), United States
JUL 2013	<b>Universität Bielefeld</b> High-Energy Physics Seminar	Bielefeld, Germany
JUN 2013	<b>Michigan State University</b> Nuclear Theory Seminar	East Lansing (MI), United States
APR 2013	<b>Universität Frankfurt</b> Nuclear Physics Colloquium	Frankfurt a.M., Germany