

AGNIESZKA SORENSEN

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EXPERIENCE

Assistant professor – FRIB/NSCL Faculty

2024/10 – PRESENT

Facility for Rare Isotope Beams, Michigan State University

- Investigated flexible momentum-dependent potential in microscopic hadronic transport.
- Worked on building a framework for joint extraction of the equation of state from heavy-ion collision and astrophysical data using Bayesian analysis and machine learning methods.

Postdoctoral scholar

2021/12 – 2024/09

Institute for Nuclear Theory, University of Washington

- Obtained a constraint on the QCD equation of state using Bayesian analysis of microscopic hadronic transport with flexible potentials and new experimental data.
- Investigated constraints on the speed of sound in nuclear matter from neutron star and heavy-ion data.
- Studied development of fluctuations in hadronic transport simulations.
- Used finite-size scaling of proton fluctuations to constrain the location of the QCD critical point.

Graduate student affiliate

2017/04 – 2021/09

Nuclear Science Division, Lawrence Berkeley National Laboratory

- Developed a flexible, relativistic vector-density-dependent (VDF) mean-field potential, with emphasis on applications to studies of the dynamical evolution of heavy-ion collisions.
- Modified the hadronic transport code SMASH to include the VDF model.
- Used SMASH with VDF model to investigate thermodynamic behavior of hot and dense nuclear matter.

Researcher

2012/10 – 2013/06

University of Wrocław, Poland

- Researched thermal behavior of pions and sigma mesons in the Polyakov-loop Nambu–Jona-Lasinio model.

EDUCATION

University of California, Los Angeles

2013/07 – 2021/09

Ph.D. in Physics. Thesis: [Density Functional Equation of State and Its Application to the Phenomenology of Heavy-Ion Collisions](#).

Thesis advisors: Prof. Huan Zhong Huang (UCLA) and Dr. Volker Koch (LBNL).

University of Wrocław, Poland

2010/10 – 2012/08

M.S. in Physics. Thesis: [Generalized Beth-Uhlenbeck Approach to a Quark-Meson Plasma in the PNJL Model](#).

Thesis advisor: Prof. David Blaschke.

University of Wrocław, Poland

2007/10 – 2010/09

B.S. in Physics

AWARDS

2023 American Physical Society Dissertation Award in Nuclear Physics	2022/10
UCLA Dissertation Year Fellowship	2020/06
UCLA Department of Physics and Astronomy Outstanding Teaching Award	2016/12

ACCEPTED OR PENDING PROPOSALS

Department of Energy, Office of Science, Nuclear Physics: Early Career Research Program (ECRP) (DE-FOA-0003450) 2025/04

(in progress)

Project title: Microscopic transport, machine learning, and Bayesian analysis for extracting the dense nuclear matter equation of state from heavy-ion collisions at RHIC and FRIB

Submitted by: Agnieszka Sorensen

Department of Energy, Office of Science, Nuclear Physics: Artificial Intelligence and Machine Learning Applied to Nuclear Science and Technology (DE-FOA-0003458) 2025/01

(pending)

Project title: Physics-informed AI to Bridge the Laboratory and Astrophysical observations for Dense Environments

Submitted by: Jacquelyn Noronha-Hostler (UIUC, lead PI), Nicolás Yunes (UIUC), Agnieszka Sorensen (MSU, local PI), Kyle Godbey (MSU)

Institute for Nuclear Theory (INT) workshop proposal (accepted) 2024/08

Workshop title: The QCD Critical Point: Are we there yet?

Submitted by: Agnieszka Sorensen, Vladimir Skokov, Helen Caines

planned for Fall 2025

NERSC 2025 allocation through Energy Research Computing Allocations Process (accepted) 2024/10

Project title: Dynamical simulations of relativistic heavy-ion collisions in the Fixed-Target program of the RHIC Beam Energy Scan II (renewal)

Submitted by: Agnieszka Sorensen

Allocation: 65,000 CPU node hours (8,320,000 CPU hours)

IRL-NPA workshop proposal (accepted) 2024/05

Workshop title: Dense Nuclear Matter Equation of State from Theory and Experiments

Submitted by: Francesca Gulminelli, Agnieszka Sorensen, Caterina Ciampi, Kyle Brown ([workshop website](#))

NERSC 2024 allocation through Energy Research Computing Allocations Process (accepted) 2023/10

Project title: Dynamical simulations of relativistic heavy-ion collisions in the Fixed-Target program of the RHIC Beam Energy Scan II

Submitted by: Agnieszka Sorensen

Allocation: 40,000 CPU node hours (5,120,000 CPU hours)

Institute for Nuclear Theory (INT) workshop proposal (accepted)

2021/09

Workshop title: Dense Nuclear Matter Equation of State from Heavy-Ion Collisions

Submitted by: Dmytro Oliinychenko, Agnieszka Sorensen, Scott Pratt

([workshop website](#), [highlights report](#))

LEADERSHIP AND COMMUNITY ENGAGEMENT

Member of the Executive Committee for the Mentorships for Inclusive Nuclear Theory (MINT) program at the INT

2024/09 – PRESENT

Institute for Nuclear Theory, University of Washington

- Helped create the blueprint for the program structure, goals, and advertising to the community.
- Initiated discussions between MINT and the APS about creating an APS-wide academic mentoring program.

Member of the Division of Nuclear Physics Mentoring Award Committee

2024/06 – PRESENT

American Physical Society

- Participated in the Mentoring Award Committee meetings.
- Led the effort to establish a robust rubric for scoring the submissions and identifying the recipient which enables a comprehensive review of the candidates' contributions to a welcoming and supportive environment, mentoring of early-career scientists from under-represented groups, and leadership in developing nuclear science research and career development opportunities for students and postdocs.

Member of the Division of Nuclear Physics Education Committee

2023/08 – PRESENT

American Physical Society

- Participated in the Education Committee activities aimed at engaging and supporting undergraduate and graduate students, postdocs, and early career members of the nuclear physics community.
- Led the organization of a (hybrid) Professional Development Workshop for Early-Career Researchers at the 2024 DNP meeting, comprised of sessions devoted to “Applying to a Tenure-Track/Lab Scientist Position” and “Funding Resources for Early-Career Scientists”.
- Leads the organization of a (hybrid) Professional Development Workshop for Early-Career Researchers at the 2025 DNP meeting, comprised of sessions devoted to “Careers Beyond Academia” and “Thriving As a Physics Graduate Student”.
- Leads establishing a strategic plan and best practices for supporting the new DNP “Nuclear Physics Education and Outreach” sorting category.

Co-organizer of the INT Undergraduate Research Network (INTURN)

2023/08 – 2024/02

Institute for Nuclear Theory, University of Washington

- Helped shape the program goals and identified ways of recruiting students from diverse backgrounds.
- Discussed and executed a timeline of activities for starting the program in early 2024.

Member of the Division of Nuclear Physics Executive Committee

2023/04 – 2024/04

American Physical Society

- Participated in the Executive Committee meetings.
- Relayed concerns of the early career members of the nuclear physics community.

- As a member of the Publications Committee, advocated to the APS journal editors for establishing tools for authors and reviewers that would help address gender disparities in citations.

Community leader in the U.S. Long Range Plan process

2022/09 – 2023/02

- Took on a leadership role in advocating for microscopic transport studies of heavy-ion collisions.
- Attended and presented at the NSAC Long Range Plan Town Hall meeting for Hot and Cold QCD.
- Attended (virtually) and presented at the NSAC Long Range Plan Town Hall meeting for Nuclear Structure, Reactions, and Astrophysics.
- As the leading editor and one of the key contributors, spearheaded an interdisciplinary white paper in support of using heavy-ion collision studies to extract the nuclear matter equation of state.
- Provided contributions and in-depth comments to three other white papers.

Member of the Physics Department Climate and Diversity Committee

2022/09 – 2023/08

University of Washington

- Within the Code of Conduct and Trainings subcommittee, worked on updating the department Code of Conduct to include ambitious expectations for creating inclusive communities as well as practical resources and avenues of conflict resolution, contributed to the development of practical trainings for harassment prevention and bystander intervention for postdocs and faculty, and supported inviting researchers working on Physics Education Research and Diversity, Equity, and Inclusion to present at departmental colloquia.
- Within the Community-Building Events subcommittee, organized Physics Department Friendsgiving Day, Pi Day Celebration, and Supporting Women+ in Physics Workshop.

Peer review

2021/10 – PRESENT

- Reviewer for Nuclear Physics A, Physical Review C, European Physical Journal A, Nature Astronomy, Physical Review D, Nature Communications Physics.

Student/Postdoc Member of the RHIC & AGS Users' Executive Committee

2021/06 – 2023/08

- Actively participated in several initiatives and communications, including formulating a list of Committee's standing requests on the quality of life and diversity, equity, and inclusion, presented at the DOE 2022 RHIC Science and Technology review.
- Co-organized the Beam Energy Scan workshop, the Diversity, Equity, and Inclusion workshop, and the poster session for the 2022 RHIC & AGS Users' Meeting.
- Co-organized the poster session for the 2023 RHIC & AGS Users' Meeting.

Organizer of the BES-Tea seminar series

2021/04 – 2023/09

- Initiated and led biweekly [online seminar series](#) focusing on open and in-depth discussions of presented subjects, centered around topics relevant to the Beam Energy Scan program at RHIC, HADES experiment at GSI, future experiments at FAIR and FRIB, and similar programs around the world.

Representative for Physics Graduate Students

2016/02 – 2017/06

Department of Physics and Astronomy, UCLA

- Led the graduate students' efforts to establish the position of a physics graduate student representative.

- Worked with the Faculty Graduate Student Advisor and administrative offices to resolve needs and concerns of physics graduate students' community.
- Initiated and led the graduate student contribution to the departmental 8-year review in 2016.
- Served as a member of the departmental Graduate Affairs Committee for the academic year 2016- 2017.

TEACHING AND MENTORING ROLES

Postdoctoral advisor

2024/II – PRESENT

Facility for Rare Isotope Beams, Michigan State University

- As an advisor for Dr. Oleh Savchuk, identified research goals and advised on professional development.

Mentor for the Summer Research Program

2023/06 – 2023/08

Louis Stokes Alliance for Minority Participation, University of Washington

- Designed a 10-week-long research project aimed at engaging a junior or senior level undergraduate student with research on the nuclear matter equation of state and heavy-ion collisions.
- Mentored a student during the program, providing introductory materials, holding daily meetings, discussing the student's results, and helping create a poster showing the outcome of the research project.
- Organized a weekly meeting for all undergraduate students taking part in summer research at the INT.

Instructor for Teaching College Physics

2016/09 – 2018/06

Office of Instructional Development, UCLA

- Revised and led the course for new Teaching Assistants at the Physics and Astronomy department, focusing on practical approaches to fostering inclusive teaching methods and high teaching ethics.
- Established effective feedback practices for a systematic evaluation of in-class performance of new TAs.

Teaching Assistant

2013/09 – 2018/06

Department of Physics and Astronomy, UCLA

- Used student-centered teaching to optimize student learning and create student-empowering classrooms.
- Created and distributed extensive learning resources for a large variety of undergraduate physics courses.
- Taught courses from the lower division (Mechanics; Oscillations, Waves and Fields; Electrodynamics and Optics; Quantum and Statistical Mechanics), upper division (Electricity and Magnetism I; Electricity and Magnetism II; Thermodynamics), and graduate (Teaching College Physics) level.
- Nominated for the 2018 UCLA-wide Distinguished Teaching Assistant award.

TEACHING AND MENTORING WORKSHOPS TAKEN

Question-Persuade-Refer suicide prevention workshop “Ask a Question, Save a Life”

2025/02

Facility for Rare Isotope Beams, East Lansing, MI

The Inclusive STEM Teaching Project

2025/02

edX online learning platform

Developing Early Career Physics Mentors workshop

2024/10

2024 Fall Meeting of the APS Division of Nuclear Physics, Boston, MA

Physics Postdoc Anti-Harassment Training <i>Empowering Prevention & Inclusive Communities, Safe Campus, University of Washington</i>	2022/05
Annual Teaching Assistant Conference <i>UCLA Teaching and Learning Center</i>	2017/09
Educational Development Summer Workshop for Teaching Assistant Coordinators <i>Center for Education Innovation & Learning in the Sciences, UCLA</i>	2017/08
Educational Development Summer Workshop for Teaching Assistant Coordinators <i>Center for Education Innovation & Learning in the Sciences, UCLA</i>	2016/08

CONFERENCES AND WORKSHOPS ORGANIZED

INT program: The QCD Critical Point: Are We There Yet? (lead organizer) University of Washington, Seattle, October 27-November 7, 2025	2025/10
IRL-NPA/FRIB workshop: Dense Nuclear Matter Equation of State from Nuclear Theory and Experiments (lead local organizer, member of Organizing Committee) Facility for Rare Isotope Beams, Michigan State University, October 28-November 1, 2024	2024/10
Professional Development for Early-Career Scientists workshop at the 2024 Fall Meeting of the Division of Nuclear Physics of the American Physical Society (lead organizer) Boston, October 7, 2024	2024/10
Supporting Women+ in Physics Workshop (co-organizer) University of Washington, Seattle, May 5-6, 2023	2023/05
INT workshop: Dense Nuclear Matter Equation of State from Heavy-Ion Collisions (lead organizer) University of Washington, Seattle, December 5-9, 2022	2022/12
Diversity, Equity, and Inclusion workshop at the 2022 RHIC & AGS Users' Meeting (lead co-organizer) Virtual meeting hosted by the Brookhaven National Laboratory, June 7-10, 2022 Brookhaven Newsroom press release	2022/06
Beam Energy Scan workshop at the 2022 RHIC & AGS Users' Meeting (lead organizer) Virtual meeting hosted by the Brookhaven National Laboratory, June 7-10, 2022	2022/06
31st Max Born Symposium and HIC for FAIR Workshop: Three Days of Critical Behavior in Hot and Dense QCD (lead co-organizer) University of Wrocław, Wrocław, Poland, June 14-16, 2013	2013/06

**48th Karpacz Winter School of Theoretical Physics:
Cosmic Matter in Heavy-Ion Collision Laboratories
(co-organizer)**

2012/02

Łądek Zdrój, Poland, February 4-11, 2012

PUBLICATIONS

B. A. BROWN *et al.*

“Motivations for Early High-Profile FRIB Experiments”

[arXiv:2410.06144](#)

A. SORENSEN, P. SORENSEN

“Locating the critical point for the hadron to quark-gluon plasma phase transition from finite-size scaling of proton cumulants in heavy-ion collisions”

[arXiv:2405.10278](#)

L. DU, **A. SORENSEN**, M. STEPHANOV

“The QCD phase diagram and Beam Energy Scan physics: a theory overview”

Int. J. of Mod. Phys. E 33 (2024) 7, 2430008, [arXiv:2402.10183](#)

N. YAO, **A. SORENSEN**, V. DEXHEIMER, J. NORONHA-HOSTLER

“Structure in the speed of sound: from neutron stars to heavy-ion collisions”

Phys. Rev. C 109 (2024) 6, 065803, [arXiv:2311.18819](#)

P. ACHENBACH *et al.*

“The Present and Future of QCD”

Nucl. Phys. A 1047 (2024) 122874, [arXiv:2303.02579](#)

A. SORENSEN *et al.*

“Dense Nuclear Matter Equation of State from Heavy-Ion Collisions”

Progr. Part. Nucl. Phys. 134 (2024) 104080, [arXiv:2301.13253](#)

A. LOVATO *et al.*

“Long Range Plan: Dense matter theory for heavy-ion collisions and neutron stars”

[arXiv:2211.02224](#)

D. ALMAALOL *et al.*

“QCD Phase Structure and Interactions at High Baryon Density: Completion of BES Physics Program with CBM at FAIR”

[arXiv:2209.05009](#)

J. STEINHEIMER, A. MOTORNENKO, **A. SORENSEN**, Y. NARA, V. KOCH, M. BLEICHER

“The high-density equation of state in heavy-ion collisions: constraints from proton flow”

Eur. Phys. J. C 82 (2022) 10, 911, [arXiv:2208.12091](#)

D. OLIINYCHENKO, **A. SORENSEN**, V. KOCH, L. MCLERRAN

“Sensitivity of Au+Au collisions to the symmetric nuclear matter equation of state at 2-5 nuclear saturation densities”

Phys. Rev. C 108 (2023) no.3, 034908, [arXiv:2208.11996](#)

H. WOLTER *et al.*

“Transport Model Comparison Studies of Intermediate-Energy Heavy-Ion Collisions”

Progr. Part. Nucl. Phys. 125 (2022) 103962, [arXiv:2202.06672](#)

A. SORENSEN

“Density Functional Equation of State and Its Application to the Phenomenology of Heavy-Ion Collisions”

UCLA (2021)

[arXiv:2109.08105](#)

X. AN *et al.*

“The BEST framework for the search for the QCD critical point and the chiral magnetic effect”

Nucl. Phys. A 1017 (2022) 122343, [arXiv:2108.13867](#)

A. SORENSEN, D. OLIINCHENKO, V. KOCH, L. MCLERRAN

“The speed of sound and baryon cumulants in heavy-ion collisions”

Phys. Rev. Lett. 127 (2021) no.4, 042303, [arXiv:2103.07365](#)

M. COLONNA *et al.*

“Comparison of heavy-ion transport simulations: Mean-field dynamics in a box”

Phys. Rev. C 104 (2021) no.2, 024603, [arXiv:2106.12287](#)

A. SORENSEN, V. KOCH

“Phase transitions and critical behavior in hadronic transport with a relativistic density functional equation of state”

Phys. Rev. C 104 (2021) no.3, 034904, [arXiv:2011.06635](#)

D. BLASCHKE, A. DUBININ, A. RADZHABOV, **A. WERGIELUK**

“Mott dissociation of pions and kaons in hot, dense quark matter”

Phys. Rev. D 96 (2017) no.9, 094008, [arXiv:1608.05383](#)

A. WERGIELUK, D. BLASCHKE, Y. L. KALINOVSKY, A. FRIESEN

“Pion dissociation and Levinson’s theorem in hot PNJL quark matter”

Phys. Part. Nucl. Lett. 10 (2013), 660-668, [arXiv:1212.5245](#)

INVITED TALKS

STAR Collaboration meeting

2024/12

Brookhaven National Laboratory, Upton, NY

“Constraining the equation of state from flow and the QCD critical point from proton fluctuations”

WPCF 2024 (17th Workshop on Particle Correlation and Femtoscopy)

2024/11

Laboratoire des 2 Infinis - Toulouse, Toulouse, France

“Scaling Analysis of Proton Cumulants and the QCD Critical Point”

2024 Fall Meeting of the Division of Nuclear Physics of the American Physical Society

2024/10

Boston, MA

“The QCD Phase Diagram and Beam Energy Scan Physics: A Theory Overview”

NN2024: 14th Nucleus-Nucleus Collisions Conference

2024/08

Whistler, BC, Canada

“Extracting Properties of Dense Nuclear Matter from Heavy-Ion Collisions”

2023 Fall Meeting of the Division of Nuclear Physics of the American Physical Society and the Physical Society of Japan 2023/11

Waikoloa, HI

“Extracting the equation of state of symmetric nuclear matter from flow observables in heavy-ion collisions”

NuSym23: XIth International Symposium on Nuclear Symmetry Energy 2023/09

GSI Helmholtz Centre for Heavy-Ion Research, Darmstadt, Germany

“The equation of state of symmetric nuclear matter from heavy-ion collisions”

FRIB Theory Alliance Topical Program: Theoretical Justifications and Motivations for Early High-Profile FRIB Experiments 2023/05

Facility for Rare Isotope Beams, East Lansing, MI

“The equation of state of dense nuclear matter from heavy-ion collisions”

STAR Collaboration meeting 2023/03

Lawrence Berkeley National Laboratory, Berkeley, CA

“Modeling physics at high baryon density with hadronic transport”

2022 Fall Meeting of the APS Division of Nuclear Physics 2022/10

New Orleans, LA

Dissertation Award Talk: “The equation of state of dense nuclear matter from heavy-ion collisions”

WPCF 2022: 15th Workshop on Particle Correlation and Femtoscopy 2022/07

Facility for Rare Isotope Beams, East Lansing, MI

“Finite number and finite size effects on fluctuations in hadronic transport”

1st Workshop on Physics at High Baryon Density 2022/03

Los Angeles, CA

“Baryon fluctuations and the speed of sound at high baryon density”

2020 RHIC & AGS Annual Users’ Meeting 2020/10

(virtual)

“Mapping out the QCD phase diagram”

CONTRIBUTED TALKS

2024 Fall Meeting of the APS Division of Nuclear Physics 2024/10

Boston, MA

“Finite Size Scaling Analysis of Proton Cumulants”

INT workshop: Heavy Ion Physics in the EIC Era 2024/07

Seattle, WA

“Transport simulations for extracting the properties of dense nuclear matter”

CPOD 2024 (15th Workshop on Critical Point and Onset of Deconfinement) 2024/05

Berkeley, CA

“Finite Size Scaling Analysis of Proton Cumulants”

INT workshop: Chirality and Criticality: Novel Phenomena in Heavy-Ion Collisions <i>Seattle, WA</i>	2023/08
“Constraints on the dense nuclear matter EOS from Au+Au collisions in the BES FXT range”	
APS April Meeting 2022 <i>Minneapolis, MN</i>	2023/04
“The equation of state of dense nuclear matter from heavy-ion collisions”	
INT program: Intersection of nuclear structure and high-energy nuclear collisions <i>Seattle, WA</i>	2023/01
“Dense Nuclear Matter Equation of State from Heavy-Ion Collisions”	
INT workshop: Dense Nuclear Matter Equation of State from Heavy-Ion Collisions <i>Seattle, WA</i>	2022/12
“Resources for diversifying nuclear physics”	
CPOD 2022: International Conference on Critical Point and Onset of Deconfinement <i>(virtual)</i>	2022/11
“Dynamical evolution of particle number fluctuations in hadronic transport”	
2022 Fall Meeting of the APS Division of Nuclear Physics <i>New Orleans, LA</i>	2022/10
“Dynamical evolution of particle number fluctuations in hadronic transport”	
Quark Matter 2022: 29th International Conference on Ultra-relativistic Nucleus-Nucleus Collisions <i>Kraków, Poland</i>	2022/04
“Measuring the speed of sound using cumulants of baryon number”	
APS April Meeting 2021 <i>(virtual)</i>	2021/04
“Cumulants: It’s not what you think”	
CPOD 2021: International Conference on Critical Point and Onset of Deconfinement <i>(virtual)</i>	2021/03
“Cumulants: It’s more than you think”	
2020 Fall Meeting of the APS Division of Nuclear Physics <i>(virtual)</i>	2020/10
“Critical behavior in mean-field hadronic transport”	
Quark Matter 2019: 28th International Conference on Ultra-relativistic Nucleus-Nucleus Collisions <i>Wuhan, China</i>	2019/11
“Phase transitions and transport in dense nuclear matter from relativistic density functionals” (poster)	
2019 Fall Meeting of the APS Division of Nuclear Physics <i>Arlington, VA</i>	2019/10
“Phase transitions and transport in dense nuclear matter from relativistic density functionals”	

- 31st Max Born Symposium & HIC for FAIR Workshop** 2013/06
Wrocław, Poland
 “Generalized Beth-Uhlenbeck approach to mesons in quark matter” (poster)
- Mini-Symposium: Dynamics of Correlations in Dense Hadronic Matter** 2012/12
Wrocław, Poland
 “Pion dissociation: A primer for Mott effect and Levinson’s theorem in hot quark matter”
- 9th Polish Workshop on Relativistic Heavy-Ion Collisions** 2012/11
Kraków, Poland
 “Thermodynamics of pion dissociation in PNJL hot quark matter”

COLLOQUIA

- Physics Colloquium** 2023/10
Physics Department, Kent State University, Kent, OH
 “Understanding QCD matter under extreme conditions with transport models”

SEMINARS

- Nuclear Physics Seminar** 2023/10
Department of Physics, Ohio State University, Columbus, OH
 “Using flow observables from RHIC Beam Energy Scan II to constrain the dense nuclear matter equation of state”
- FRIB Theory Seminar** 2023/04
Facility for Rare Isotope Beams, Michigan State University, East Lansing, MI
 “The equation of state of dense nuclear matter from heavy-ion collisions”
- Nuclear Physics Seminar** 2023/04
Physics Department, University of Illinois Urbana-Champaign, Champaign, IL
 “The equation of state of dense nuclear matter from heavy-ion collisions”
- RHIC-BES: Online seminar series on RHIC Beam Energy Scan** 2023/03
(virtual)
 “Dense nuclear matter equation of state from heavy-ion collisions”
- Hadron-Ion Tea seminar** 2023/03
Nuclear Science Division, Lawrence Berkeley National Laboratory, Berkeley, CA
 “The equation of state of dense nuclear matter from heavy-ion collisions”
- Theory Seminar** 2022/12
Theory Center, Institute for Nuclear Physics, Technische Universität Darmstadt (virtual)
 “The speed of sound of dense nuclear matter from heavy-ion collisions”
- Seminar in Hadronic Physics** 2022/12
Department of Physics, McGill University (virtual)
 “The equation of state of dense nuclear matter from heavy-ion collisions”

- Particle, Astro, and Nuclear Seminar** 2022/12
Physics & Astronomy Department, Wayne State University (virtual)
 “The equation of state of dense nuclear matter from heavy-ion collisions”
- Nuclear Theory Seminar** 2022/05
School of Physics and Astronomy, University of Minnesota, Minneapolis, MN
 “The speed of sound in heavy-ion collisions”
- Institute for Theoretical Physics Seminar** 2022/04
Department of Physics and Astronomy, University of Wrocław, Wrocław, Poland
 “Measuring the speed of sound in matter created in heavy-ion collisions”
- S@INT Seminar** 2022/02
Institute for Nuclear Theory, University of Washington, Seattle, WA
 “Measuring the speed of sound in matter created in heavy-ion collisions”
- Particle, Astro, and Nuclear Seminar** 2021/05
Physics & Astronomy Department, Wayne State University (virtual)
 “Mean-field equations of state in hadronic transport and beyond”
- Triangle Nuclear Theory Colloquium** 2021/01
Duke University & University of North Carolina at Chapel Hill & North Carolina State University (joint, virtual)
 “Mapping out the phase diagram of QCD in hadronic transport”
- Seminar in Hadronic Physics** 2020/12
Department of Physics, McGill University (virtual)
 “Mapping out the phase diagram of QCD in hadronic transport”
- Nuclear Physics Seminar** 2020/12
Physics & Astronomy Department, University of California, Los Angeles & Nuclear Science Division, Lawrence Berkeley National Laboratory (joint, virtual)
 “Mapping out the phase diagram of QCD in hadronic transport”
- Nuclear Physics Journal Club** 2020/06
Department of Physics, University of Illinois Urbana-Champaign & Department of Physics, University of Houston (joint, virtual)
 “Critical behavior in mean-field hadronic transport”