

Curriculum Vitae

Name: Or Hen

Date and place of birth: 17-Dec-1987, Jerusalem, Israel.

Homepage: www.hen-lab.com

Email: hen@mit.edu

Education:

2015	Ph.D.	Physics	Tel-Aviv University
2010	B.A.	Physics	Hebrew University
2010	B.Sc.	Computer Engineering	Hebrew University

Professional Experience:

Associate Professor, Physics Department, MIT	2021 - Present
Assistant Professor, Physics Department, MIT	2017 - 2021
Pappalardo Post-Doctoral Fellow, MIT	2015 - 2017
Senior Academic Officer (Experimental Physics), IDF General Corps	2009 - 2015
Provisioning engineer, FTL lab, Intel	2007 - 2009

Fellowships and Awards:

American Physical Society (APS) Fellow	2022
Class of 1956 CD Professorship Chair (MIT)	2021 - 2024
Alfred P. Sloan Research Fellow	2020
American Physical Society (APS) Stuart J. Freedman Award	2019
U.S. DOE Office of Science Early Career Award	2019
IUPAP/INPC Young Scientist Prize in Nuclear Physics	2019
NEC Corporation Fund Award	2019
Guido Altarelli Award	2018
MIT Amar G. Bose Fellowship	2018
Fermilab Intensity Frontier Fellowship	2016 - 2018
Jefferson Science Associates (JSA) Graduate Thesis Prize	2016
Israeli Physical Society (IPS) prize for graduate research in Experimental Physics	2015
MIT Pappalardo Fellowship	2015 - 2017
Rothschild Fellowship	2015 - 2016
Israeli Council for Higher Education, Amnon Pazi Award	2013
Tel-Aviv University, Juda Eisenberg Award	2011

Talks: 166 oral presentations given in the form of invited & plenary talks (104) and seminars & colloquia (62). Full list appended below.

Mentoring and Management Development:

Personal Executive Training, MIT via Keystone Partners	2022
Leadership & Management Training, MIT via HFP Consulting	2019

Professional Activities:

Community Service & Outreach	• Funding Agency Reviewer: NSF, DOE, BSF, ISF, CSF, Pazi Foundation, and others	
	• Chair-Elect (2023/24), Chair (2024/25), and Past-Chair (2025/26), Electron-Ion Collider Users Group (~1400 members from 36 countries)	2023 – 2026
	• Member, National Advisory Committee, Institute for Nuclear Theory (INT)	2024 – 2027
	• Vice-Chair (2023) and Chair (2024), APS Stuart J. Freedman Award selection committee	2023 – 2024
	• LOC Chair and Organizing Committee and White Paper Writing Committee Member, DOE and NSF Nuclear Science Advisory Committee (NSAC) Long-Range Plan Town Hall Meeting on Hot and Cold QCD	Fall '22
	• Member, DOE-HEP Early Career Award Review Super Panel	Spring '22
	• Member, DOE-HEP Neutrino Theory Network (NTN) Review Panel	Spring '22
	• Co-Chair, National Nuclear Physics Summer Scholl (NNPSS)	Summer '22
	• Vice-Chair (2024) and Chair (2025), APS Committee on Scientific Meetings	2024 – 2025
	• Member, APS Committee on Scientific Meetings	2022 – 2023
	• Co-convener, Electron-Ion Collider Users Community Yellow-Report, Working Group on Diffractive and Tagged Processes	2020 – 2021
	• Member, APS New England Section (NES) Executive Committee	2020 – 2023
	• Member, APS Stuart J. Freedman Award selection committee	2020
	• Member, APS Division of Nuclear Physics (DNP) Program Committee	2017 – 2019; Fall '21
	• Member, Jefferson Lab Users Group Board of Directors	2017 – 2019
	• Member, Joint Institute for Nuclear Research Baryonic Matter Executive Council	2019 – 2021
	• Member, US Nuclear Physics 'Day on the Hill' Senate and Congress advocacy day committee	2019
	• Scientific advisor, Nova documentary on the physics of atoms and nuclei	2018
	• Reviewer, APS Conference Experience for Undergraduates (CUE) program	Multiple Years
	• MIT representative, APS Conference for Undergraduate Women in Physics (CUWiP)	Multiple Years

Journal Editor & Reviewer	<p>Journal Reviewer: PRL, Nature, Science, PLB, PRD, PRC, NIM-A, and others</p> <ul style="list-style-type: none"> • Editorial Board Member, Physical Review C 2022 – 2025 • Guest Editor, MIN-A Special Issue on “Detector Technologies for the Electron-Ion Collider” 2022 • Invited Editor, EPJA Topical Issue on "Short Range Correlations" 2022 • Editor, Modern Physics Letters A (MPLA) 2020 – present • Editor, International Journal of Modern Physics A (IJMPA) 2020 – present • Associate Editor and Editorial Board Member, Frontiers in Physics, Nuclear Physics Section. 2022 – present • Review Editor and Editorial Board Member, Frontiers in Physics, Nuclear Physics Section. 2020 – 2022
Conference Organization	<ul style="list-style-type: none"> • Convener, 3rd African Nuclear Physics Conference (ANPC 2023), workshop on “Opportunities for Knockout Reaction Studies: Short Range Correlations” (Kruger Park, South Africa) August ‘23 • Chair (contact), CFNS workshop on Electron-nuclei Interaction at the Electron-Ion Collider July ‘23 • Member, organizing committee, 4th International Workshop on Quantitative Challenges in Short-Range Correlations (SRC) and EMC Effect Research (CEA Paris-Saclay, France) Jan. ‘23 • Member, organizing committee, workshop on Opportunities with JLab Energy and Luminosity Upgrade (ECT*, Trento, Italy) Sep. ‘22 • Convener, 9th International Conference on Quarks and Nuclear Physics (QNP22), for the topic “Short Range Correlations” (Tallahassee, FL) Sep. ‘22 • Chair, local organizing committee (LOC), Fall Meeting of the APS Division of Nuclear Physics (APS-DNP) (Boston, MA) Oct. ‘24 Oct. ‘21 • Co-Chair, Symposium on QCD and Nuclei (Boston, MA) Oct. ‘21 • Co-Chair, 3rd International Workshop on Quantitative Challenges in EMC and SRC Research (Newport News, VA) March ‘21 • Member, organizing committee, 4th International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams (QFS-RB19) (Maresias, Brazil) Oct. ‘19 • Chair, 2nd International Workshop on Quantitative Challenges in EMC and SRC Research (Cambridge, MA) March ‘19 • Member, organizing committee, International Workshop on (e,e’p) processes (Bled, Slovenia) July ‘17 • Co-chair, International Workshop on Tabletop Experiments with Skyscraper Reach (Cambridge, MA) Aug. ‘17 • Chair, International Workshop on Quantitative Challenges in EMC and SRC Research (Cambridge, MA) Dec. ‘16

- Chair, International Conference, Frontiers in Photonuclear Science (Paphos, Cyprus) **Oct. '15**
- Member, organizing committee, International Workshop on QCD in the Nuclear Medium (Tel-Aviv, Israel) **June '13**

Experiment
Leadership

Electron-Ion Collider:

- ePIC Collaboration: Co-Founder and Steering Committee Member **May '22 – Feb. '23**
- ECCE Consortium: Co-Founder and Steering Committee Member **Feb. '21 – May '22**

Thomas Jefferson National Laboratory (co-spokesperson):

- CLAS Data-Mining Collaboration **2017 – 2020**
- E12-23-013: Measuring Short-Range Correlations with ALERT
- E12-20-005: Precision Measurements of A=3 Nuclei in CLAS12
- E12-19-003: Studying Short-Range Correlations with Real Photon Beams at GlueX
- E12-17-006A: Exclusive Studies of Short-Range Correlations in Nuclei using CLAS12
- E12-17-006: Electrons for Neutrinos: Addressing Critical Neutrino-Nucleus Issues
- E12-17-005: CaFe Experiment: Short-Range Pairing Mechanisms in Heavy Nuclei
- E12-11-003A: In Medium Proton Structure function, SRC, and the EMC effect
- E12-14-011: Proton and Neutron Momentum Distribution in A=3 Nuclei
- E12-11-107: In Medium Nucleon Structure functions, SRC, and the EMC effect

Joint Institute for Nuclear Research (co-spokesperson):

- Study of Short-Range Correlation in Inverse Kinematics at BM@N

GSI Helmholtz Centre for Heavy Ion Research (co-spokesperson):

- First characterization of Short-Range Correlations in exotic nuclei at R³B

Collaboration
Membership

- ePIC, ECCE consortium, Electron Ion Collider Users Group,
- Jefferson Lab Users Group, Hall A, Hall C, CLAS, and Data-mining,
- Electrons-for-Neutrinos (founding member),
- MicroBooNE (Fermilab),
- BM@N (JINR),
- R3B (GSI),
- GENIE.

Institute:

- Member, Institute International Advisory Committee **Fall '23 – Spring '26**
- Member and School of Science representative, Institutional Classroom Advisory Board **Fall '23 – Present**
- Member, Presidential advisory group on antisemitism **Fall '23 – Present**
- Advisor, freshman academic advising program **Academic Year '19/'21, '22/'23**
- Advisor, 8.01 advising program **Fall '20**

Physics Department:

- Member, faculty search committee (NuPaX division) **Academic Year '21/'22, '22/'23**
- Member, Pappalardo Fellowship executive Committee **Fall '22**
- Faculty liaison, departmental postdoc association **Spring '19 – Present**
- Member and section lead for quantum mechanics, written graduate qualifying exam committee **Fall '28 – IAP '22**
- Chair and section lead for quantum mechanics, written graduate qualifying exam committee **Spring '22 – Spring '23**
- Chair, Ad-Hoc committee on graduate core requirements fulfilment **Spring '23**
- Member, Ad-Hoc committee on graduate core requirements scope **Spring '23**
- Member, strategic plan committee (NuPaX Division) **Spring '21 – Fall '21**
- Interviewer, graduate admissions (NuPaX division) **IAP '22**
- Member, graduate qualifying oral exam committee (NuPaX Division) **Academic Year '18/'19, '19/'20**
- Chair, graduate qualifying oral exam committee (NuPaX Division) **Academic Year '20/'21**
- Advisor, undergraduate and graduate students academic advising program **Fall '17 – Present**
- Member, physics@mit editorial board **Spring '19 – Spring '21**
- Organizer, Faculty lunchtime science meeting series **Spring '20 – Present**
- Member, Graduate thesis committee, Julian Picard **Spring '21 – Fall '21**
- Member, Graduate thesis committee, Stella Schindler **Fall '22 – Present**
- Member, Graduate thesis committee, Benjamin Lee Reichelt **Fall '22 – Present**

Laboratory for Nuclear Science (LNS):

- Co-chair, taskforce on diversity equity and inclusion **Summer '20 – Fall '22**
- Member, COVID-19 monitoring & compliance committee **Summer '20 – Spring '21**
- Member, colloquium committee **Fall '18 – Fall '19**
- Chair, colloquium committee **Spring '20 – Spring '23**
- Member, lunchtime seminar committee **Academic Year**

'18/'19, '19/'20

Academic External to MIT:

- Member, William & Mary Collage graduate thesis examination committee, Luis Zazueta **Spring '22 – Fall '23**
- Member, Hebrew University graduate thesis committee, Saar Beck **Spring '20 – Present**

Teaching

- MIT 8.01, Classical Mechanics **Fall '17, '19, '20, '22**
- MIT 8.711, Graduate Nuclear Physics **Spring '18, '19, '20, '21**
- MIT 8.03, Vibrations and waves **Spring '23**
- MIT 8.13, Junior Physics Lab **Fall '18**
- Hebrew University 77613, Simulation of Transport of Particles and Radiation **Fall '08**
- Lecturer, NSF-UConn Summer School on saturation and the EIC (Storrs, CT), course on “EIC Physics from an Experimental Perspective” **August '23**
- Lecturer, STFC Summer School (Sheffield, UK), course on “Hadronic Physics” **March '22**
- Lecturer, 19th CNS International Summer School (Tokyo Japan), course on “Nuclear correlations via electron beams” **Aug. '20**
- Lecturer, 32nd HUGS summer school program (Newport News VA), course on “Long- and short-ranged nuclear structure” **July '17**

Mentoring:

(Dates represent time period spent working with the group. Employment information is next or last known position)

Graduate Students

Current:

12. Mr. Jackson Pybus **Sep. '18 – Present**
[JLab EIC Center Fellow '20, '21; JSA Fellow '22]
11. Mr. Andrew Denniston **Sep. '18 – Present**
[JSA Fellow '22]
10. Ms. Hang Qi **Sep. '20 – Present**
[MIT Presidential Fellow '20]
9. Ms. Allen Magdalena **Jan. '21 – Present**
[NSF Fellow; Performing Medical physics research in collaboration with MGH & Harvard]
8. Ms. Natalie Wright **Sep. '21 – Present**
7. Mr. Jason Phelan **Sep. '21 – Present**
6. Mr. Lucas Ehinger **Sep. '22 – Present**

Former:

5. Dr. Efrain Segarra **July '16 – June '22**

Current Position: Laboratory Fellow, Paul Scherrer Institute (PSI).

Dissertation: Disentangling the EMC effect: from free to bound

nucleon structure
[NSF Fellow; Ford Foundation Fellow]

4. Dr. Afroditi Papadopoulou **July '16 – April '22**

Current Position: M.G. Mayer Fellow, Argonne National Lab.

Dissertation: Lepton-Nucleus Scattering Measurements for Neutrino Interactions and Oscillations

[Lourie Fellow '16; Henry Kendall (1955) Fellow '16; URA Fellow '17, '19, '20; George and Marie Vergottis Fellow '21]

3. Dr. Reynier Cruz Torres **Sep. '15 – April '20**

Current Position: Deep Learning Engineer, Dyneti Technologies (Following postdoc at UC Berkeley / LBNL)

Dissertation: Two-Nucleon Short-Range Correlations in Light Nuclei

[MIT Sergio Vazquez Prize; JSA Graduate Fellow]

2. Dr. Barak Schmookler **Sep. '15 – July '18**

Current Position: EIC Project Scientist, UC Riverside and UC EIC Consortium (Following postdoc at Stony Brook University CFNS)

Dissertation: Nucleon Structure and its Modification in Nuclei

1. Dr. Longwu Ou **Sep. '15 – Aug. '18**

Current Position: Senior AI Research Scientist, Lightelligence

Dissertation: Precision measurements of electron-proton elastic scattering cross sections at large Q^2

Postdoctoral
Fellows

Current:

13. Dr. Tyler Kutz **Dec. '19 – Present**

[Zuckerman Fellow]

12. Dr. Julian Kahlbow **Jan. '20 – Present**

11. Dr. Justin Estee **Oct. '20 – Present**

10. Dr. Igor Korover **Nov. '20 – Present**

[CFNS Fellow; Accepted an Assistant Professor position with Tel-Aviv University starting July '24]

Former:

9. Dr. Joshua Barrow **June '21 – July '23**
Postdoctoral Associate,
University of Minnesota

[Zuckerman Fellow]

8. Prof. Nathaly **Oct. '20 – Jan. '22**
Santiesteban Assistant Professor,
University of New Hampshire

[MIT School of Science Fellow]

	7. Dr. Florian Hauenstein	Staff Scientists, Thomas Jefferson National Accelerator Facility [JSA Promising Young Scientist Award]	Sep. '19 – Oct. '21
	6. Dr. Adi Ashkenazi	Senior Lecturer (Assistant Professor), Tel-Aviv University [G. Altarelli Award; Tollestrup Award; FNAL Intensity Frontier Fellow; National Postdoctoral Award for Advancing Women in Science; Zuckerman STEM Leadership Fellow]	Sep. '17 – Oct. '20
	5. Dr. Holly Szumila-Vance	Staff Scientists, Thomas Jefferson National Accelerator Facility	Jan. '20 – June '20
	4. Prof. Dien Nguyen	Assistant Professor, University of Tennessee (starting Jan. '24) [Nathan Isgur Fellow]	March '19 – June '20
	3. Prof. Axel Schmidt	Assistant Professor, George Washington University	Sep. '16 – Dec. '19
	2. Dr. Maria Patsyuk	Staff Scientists, Joint Institute for Nuclear Research	June '17 – June '19
	1. Dr. Georgios Laskaris	Consultant, Ab-Initio Software	Sep. '16 – May '18
Post-baccalaureate Scientists	3. Mr. Alex Kiral	Graduate student, Stanford [Paglia Research Fellow]	Aug. '20 – Aug. '22
	2. Ms. Natalie Wright	Graduate student, MIT	June '20 – Aug. '21
	1. Mr. Adin Hrnjic	Graduate student, UIUC	June '18 – May '19
Visiting Scientists	4. Dr. Ehoud Pazy	IAEC Israel	Oct. '21 – Sep. '22
	3. Dr. Sharon Mey-Tal Beck	IAEC Israel	Sep. '17 – Aug. '18
	2. Dr. Arie Beck	IAEC Israel	Sep. '17 – Aug. '18
	1. Prof. Taofeng Weng	Beihang University, China	Sep. '16 – Aug. '17
Undergraduate Students	13. Ms. Anjali Nambrath	Graduate student, UC Berkley <u>Dissertation</u> : Benchmarking of neutrino energy reconstruction methods using electron-deuterium scattering data [APS CEU Fellowship; Paul E. Gray (1954) Endowed Fund for UROP project; Fulbright fellow (India); MIT Laya W. Wiesner Award, Order of the Lepton Award, and Malcolm Cotton Brown Awards; Phi Beta Kappa Member]	Fall '17 – Fall '18; Spring '19 – Spring '21
	12. Mr. Oluwaseun Ogunde		IAP '18; Summer '18; Spring '20 – Fall '21
	11. Mr. Samuel Solomon	Graduate student, Caltech [APS CEU Fellowship; 2020 MIT Chemistry Department Award for outstanding research achievements]	Spring '19 – Spring '20
	10. Mr. Hector Iglesias	Graduate student, Rice University	Fall '19 – Spring '20

9. Mr. Adin Hrnjic	Graduate student, UIUC	Summer '16 – Spring '18
8. Mr. Connor Chung		IAP '17 – May '17
7. Mr. Sean Gloumeau	EMJMD scholar, European Master program in Embedded Computing Systems	Summer '17 – IAP '18
6. Mr. Ting-Chun Lin		Fall '17 – Spring '19
5. Ms. Kirsten Surrao	Graduate student, Columbia University	Fall '17 – Summer '18
	[APS CEU Fellowship]	
4. Mr. Joseph Iosue	Graduate student, University of Maryland	Fall '17 – Fall '18
3. Mr. Yong-Hui Lim		Fall '17 – Spring '18
2. Ms. Peninah Levine	Graduate student, MIT	Fall '18 – Summer '19
	[APS CEU Fellowship]	
1. Mr. Adrian Silva		Fall '17 – Fall '18
	[APS CEU Fellowship; Paul E. Gray (1954) Endowed Fund for UROP project]	

Selected Publications – Or Hen

Lists publications that I co-authored and report on work led / co-led by myself and my group. This list does not include ‘collaboration publications’ that I co-authored but did not make a direct and significant enough contribution too in order to be included in the list below.

Forthcoming commissioned articles:

75. “Short-Ranged Nucleon-Nucleon Correlations”

O. Hen

Physics Reports (Ed. M.J. Ramsey-Musolf).

74. “The Nuclear EMC Effect: Current status and future perspectives”

E.P. Segarra, F. Hauenstein, A. Schmidt and *O. Hen*.

Reports on Progress in Physics (Ed. G. Baym).

Submitted for publication:

[lists papers that are undergoing peer-review for journal publication. Once published, the journal reference will be updated at: www.hen-lab.com/publications]

74. “Evidence for Modified Quark-Gluon Distributions in Nuclei by Correlated Nucleon Pairs”

A.W.Denniston, T. Jezo, A. Kusina, N. Derakhshanian, P. Duwentaster, and *O. Hen* et al.

arXiv: 2312.16293

73. “Probing axion-like particles at the Electron-Ion Collider”

R. Balkin, *O. Hen*, W. Li, H. Liu, T. Ma, Y. Soreq, and M. Williams.

arXiv: 2310.08827

72. “Search for axion-like particles through nuclear Primakoff production using the GlueX detector”

J.R. Pybus, T. Kolar, B. Devkota, P. Sharp, B. Yu, and *O. Hen* et al.

arXiv: 2308.06339

71. “Design of the ECCE Detector for the Electron Ion Collider”

J.K. Adkins et al. (ECCE Consortium)

arXiv: 2209.02580

70. “Open Heavy Flavor Studies with the ECCE Detector at the Electron Ion Collider”

X. Li et al. (ECCE Consortium)

arXiv: 2207.09437

69. “Nucleon off-shell structure and the free neutron valence structure from A=3 inclusive electron scattering measurements”

E.P. Segarra, J.R. Pybus, F. Hauenstein, T. Kutz, D.W. Higinbotham, G.A. Miller, E. Piasetzky, A. Schmidt, M. Strikman, L.B. Weinstein, and *O. Hen*.

arXiv: 2104.07130

Corresponding author: O. Hen.

68. **“Transport Estimations of Final State Interaction Effects on Short–range Correlation Studies Using the (e,e’p) and (e,e’pp) Reactions”**
N. Wright, A. Papadopoulou, J.R. Pybus, S. Gardiner, M. Roda, F. Hauenstein, A. Ashkenazi, L. Weinstein, A. Schmidt, E. Piassetzky, and *O. Hen*.
arXiv: 2104.05090
Corresponding author: O. Hen.

Published:

67. **“First double-differential measurement of kinematic imbalance in neutrino interactions with the MicroBooNE detector”**
P. Abratenko et al. (MicroBooNE Collaboration).
Phys. Rev. Lett. 131, 101802 (2023)
Based on analysis lead by A. Papadopoulou (MIT), A. Ashkenazi (TAU), and *O. Hen* (MIT).
66. **“Multi-Differential Cross Section Measurements of ν_{μ} -Argon Quasielastic-like Reactions with the MicroBooNE Detector”**
P. Abratenko et al. (MicroBooNE Collaboration).
Phys. Rev. D 108, 053002 (2023)
Based on analysis lead by A. Papadopoulou (MIT), A. Ashkenazi (TAU), and *O. Hen* (MIT).
65. **“Observation of Large Missing-Momentum (e,e’p) Cross-Section Scaling and the Onset of Correlated-Pair Dominance in Nuclei”**
I. Korover, A.W. Denniston, A. Kiral, A. Schmidt, A. Lovato, N. Rocco, L.B. Weinstein, E. Piassetzky, and *O. Hen* et al. (CLAS Collaboration).
Phys. Rev. C Lett. 107, L061301 (2023).
Corresponding author: O. Hen.
64. **“The Present and Future of QCD”**
P. Achenbach et al. (U.S. QCD Research Community)
arXiv: 2303.02579
QCD Town Meeting White Paper, submitted to 2023 NSAC Long-Range Plan committee.
63. **“Detector Requirements and Simulation Results for the EIC Exclusive, Diffractive and Tagging Physics Program using the ECCE Detector Concept”**
A. Bylinkin et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1052, 168238 (2023).
62. **“Design and Simulated Performance of Calorimetry Systems for the ECCE Detector at the Electron Ion Collider”**
F. Bock et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1055, 168464 (2023).
61. **“ECCE unpolarized TMD measurements”**
R. Seidl et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1055, 168458 (2023).
60. **“Evaluation of longitudinal double-spin asymmetry measurements in semi-inclusive deep-inelastic scattering from the proton for the ECCE detector design”**
C. Van Hulse et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1056, 168563 (2023).

59. “**Search for $e \rightarrow \tau$ Charged Lepton Flavor Violation at the EIC with the ECCE Detector**”
J.-L Zhang et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1053, 168276 (2023).
58. “**ECCE Sensitivity Studies for Single Hadron Transverse Single Spin Asymmetry Measurements**”
R. Seidl et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1049, 168017 (2023).
57. “**Exclusive J/ψ detection and physics with ECCE**”
X. Li et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1048, 167956 (2023).
56. “**AI-assisted Optimization of the ECCE Tracking System at the Electron Ion Collider**”
C. Fanelli et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1047, 167748 (2023).
55. “**Scientific Computing Plan for the ECCE Detector at the Electron Ion Collider**”
J.C. Bernauer et al. (ECCE Consortium)
Nucl. Instrum. Meth. A 1047, 167859 (2023).
54. “**Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report**”
R. Abdul Khalek et al. (EIC Users Community)
Nucl. Phys. A 1026, 122447 (2022).
Contributed to specific studies and worked as working group convenor for Diffraction and Tagging physics
53. “**Search for a bound Di-neutron by comparing ${}^3\text{He}(e,e'p)d$ and ${}^3\text{H}(e,e'p)X$ measurements**”
D. Nguyen*, C. Neuburger*, R. Cruz-Torres, A. Schmidt, D.W. Higinbotham, J. Kahlbow, P. Monaghan, E. Piasetzky, and *O. Hen*.
Phys. Lett. B 831, 137165 (2022).
*Equal Contribution. Corresponding author: O. Hen.
52. “**Measuring Recoiling Nucleons from the Nucleus with the Electron Ion Collider**”
F. Hauenstein, A. Jentsch, J. R. Pybus, A. Kiral, M. D. Baker, Y. Furlotova, *O. Hen*, D.W. Higinbotham, C. Hyde, V. Morozov, D. Romanov, and L.B. Weinstein.
Phys. Rev. C 105, 034001 (2022).
51. “**Electron Beam Energy Reconstruction for Neutrino Oscillation Measurements**”
M. Khachatryan*, A. Papadopoulou*, A. Ashkenazi, F. Hauenstein, A. Nambrath, A. Hrnjic, L.B. Weinstein, and *O. Hen* et al. (CLAS and $e4\nu$ Collaborations).
Nature 599, 565 (2021).
*Equal Contribution by MIT and ODU students.
Featured in Nature ‘News and Views’: N. Rocco, Nature 599, 560 (2021).
50. “**Unperturbed inverse kinematics nucleon knockout measurements with a carbon beam**”
M. Patsyuk, J. Kahlbow, G. Laskaris, V. Lenivenko, and E. P. Segarra et al. (BM@N Collaboration).
Nature Physics 17, 693 (2021).
Corresponding author: O. Hen.
Featured in Nature Physics ‘News and Views’: J. Ryckebusch, Nature Physics 17, 667 (2021).

49. **“Many-Body Factorization and Position-Momentum Equivalence of Nuclear Short-Range Correlations”**
 R. Cruz-Torres, D. Lonardonì, R. Weiss, N. Barnea, D.W. Higinbotham, E. Piasetzky, A. Schmidt, L.B. Weinstein, R.B. Wiringa, and *O. Hen*.
Nature Physics 17, 306 (2021).
 Corresponding author: O. Hen.
 Featured in Nature Physics ‘News and Views’: M. Urban, Nature Physics 17, 294 (2021).
48. **“From Nuclear Clusters to Neutron Stars”**
O. Hen.
Science 371, 232 (2021).
 Commissioned commentary.
47. **“Neutron Spin Structure from e-³He Scattering with Double Spectator Tagging at the Electron-Ion Collider”**
 I. Friscic, D. Nguyen, J. R. Pybus, A. Jentsch, E.P. Segarra, M.D. Baker, *O. Hen*, D.W. Higinbotham, R. Milner, A.S. Tadepalli, Z. Tu, and J. Rittenhouse West.
Phys. Lett. B 823, 136726 (2021).
46. **“¹²C(e,e'pn) Measurements of Short Range Correlations in the Tensor-to-Scalar Interaction Transition Region”**
 I. Korover, J. R. Pybus, A. Schmidt, F. Hauenstein, M. Duer, E. Piasetzky, L.B. Weinstein, and *O. Hen* et al. (CLAS Collaboration).
Phys. Lett. B 820, 136523 (2021).
 Corresponding author: O. Hen.
45. **“Extracting the number of short-range correlated nucleon pairs from inclusive electron scattering data”**
 R. Weiss*, A.W. Denniston*, J.R. Pybus, E. Piasetzky, A. Schmidt, L.B. Weinstein, *O. Hen*, and N. Barnea.
Phys. Rev. C Lett. 103, L031301 (2021).
 *Equal Contribution.
44. **“Short-Range Correlations and the Nuclear EMC Effect in Deuterium and Helium-3”**
 E.P. Segarra, J.R. Pybus, F. Hauenstein, D.W. Higinbotham, G.A. Miller, E. Piasetzky, A. Schmidt, M. Strikman, L.B. Weinstein, and *O. Hen*.
Phys. Rev. Research 3, 023240 (2021).
 Corresponding author: O. Hen.
43. **“Inclusive Electron Scattering and the GENIE Neutrino Interactions Event Generator”**
 A. Papadopoulou, A. Ashkenazi, S. Gardiner, M. Betancourt, S. Dytman, L.B. Weinstein, E. Pasetzky, F. Hauenstein, M. Khachatryan, S. Dolan, G. Megias, and O. Hen.
Phys. Rev. D 103, 113003 (2021).
42. **“nCTEQ15HIX: Extending nPDF Analyses into the High-x Region with New Jefferson Lab Data”**
 E.P. Segarra, T. Jezo, A. Accardi, P. Duwentaster, *O. Hen*, T.J. Hobbs, C. Keppel, M. Klasen, K. Kovarik, A. Kusina, J.G. Morfin, M.K. Muzakka, F.I. Olness, I. Schienbein and J.Y. Yu.
Phys. Rev. D 103, 114015 (2021).

41. **“A 90° bend curved light-guide for TOF scintillating detectors”**
M. Olivenboim, L. Burshtein, A.W. Denniston, *O. Hen*, J. Kahlbow, S. May-Tal Beck, E. Piasetzky, E.P Segarra, T. Shapira, and S. Segev.
Nucl. Instrum. Meth. A 1018, 165825 (2021).
40. **“From Quarks to Nuclei: Short Range Correlations Studies Across the Globe”**
F. Hauenstein, J. Kahlbow and *O. Hen*.
Nuclear Physics News 31, 19 (2021).
Commissioned feature article.
39. **“Probing the core of the strong nuclear interaction”**
A. Schmidt et al. (CLAS Collaboration).
Nature 578, 540 (2020).
Corresponding author: O. Hen.
Featured in Nature ‘News and Views’: A. Gade, Nature 578, 524 (2020).
38. **“First measurement of differential charged current quasielastic-like ν_{μ} -argon scattering cross-sections using the MicroBooNE detector”**
P. Abratenko et al. (MicroBooNE Collaboration).
Phys. Rev. Lett. 125, 201803 (2020).
Based on analysis lead by A. Papadopoulou (MIT), E.O. Cohen (TAU), A. Ashkenazi (MIT), E. Piasetzky (TAU), and *O. Hen* (MIT).
37. **“Probing few-body nuclear dynamics via ^3H and ^3He (e,e’p)pn cross-section measurements”**
R. Cruz-Torres, D. Nguyen, F. Hauenstein, and A. Schmidt et al. (Jefferson Lab Tritium Collaboration).
Phys. Rev. Lett. 124, 212501 (2020). [Editor’s suggestion]
Corresponding author: O. Hen.
36. **“Neutron valence structure from nuclear deep inelastic scattering”**
E.P. Segarra, A. Schmidt, T. Kutz, D.W. Higinbotham, E. Piasetzky, M. Strikman, L.B. Weinstein, and *O. Hen*
Phys. Rev. Lett. 124, 092002 (2020).
Corresponding author: O. Hen.
35. **“Generalized Contact Formalism Analysis of the $^4\text{He}(e,e’pN)$ Reaction”**
J.R. Pybus, I. Korover, R. Weiss, A. Schmidt, N. Barnea, D.W. Higinbotham, E. Piasetzky, M. Strikman, L.B. Weinstein, and *O. Hen*.
Phys. Lett. B 805, 135429 (2020).
Corresponding author: O. Hen.
34. **“Probing short-range correlations in the deuteron via incoherent diffractive J/ψ production with spectator tagging at the EIC”**
Z. Tu, A. Jentsch, M. Baker, L. Zheng, J.-H. Lee, R. Venugopalan, *O. Hen*, D. Higinbotham, E.C. Aschenauer, T. Ullrich.
Phys. Lett. B 811, 135877 (2020).
33. **“Nucleon-nucleon correlations and the single-particle strength in atomic nuclei”**
S. Paschalis, M. Petri, A.O. Macchiavelli, *O. Hen*, and E. Piasetzky.
Phys. Lett. B 800, 135110 (2020).
32. **“Laser Calibration System for Time of Flight Scintillator Arrays”**
A.W. Denniston, E.P. Segarra, and M.O. Olivenboim et al.
Nucl. Instrum. Meth. A 973, 164177 (2020).

31. **“The CLAS12 Backward Angle Neutron Detector (BAND)”**
E.P. Segarra, F. Hauenstein, and A. Schmidt et al.
Nucl. Instrum. Meth. A 978, 164356 (2020).
30. **“The CLAS12 Spectrometer at Jefferson Laboratory”**
V.D. Burkert et al (CLAS Collaboration).
Nucl. Instrum. Meth. A 959, 163419 (2020).
Presents the BAND detector whose R&D and construction was led by my MIT group.
29. **“Modified Structure of Protons and Neutrons in Correlated Pairs”**
B. Schmookler, M. Duer, A. Schmidt and *O. Hen* et al. (CLAS Collaboration).
Nature 566, 354 (2019).
Corresponding author: O. Hen.
Featured in Nature ‘News and Views’: G. Feldman, Nature 566, 332 (2019).
28. **“Direct Observation of Proton-Neutron Short-Range Correlation Dominance in Heavy Nuclei”**
M. Duer, A. Schmidt and J. Pybus et al. (CLAS Collaboration).
Phys. Rev. Lett. 122, 172502 (2019).
Corresponding author: O. Hen.
27. **“Comparing proton momentum distributions in $A = 2$ and 3 nuclei via ^2H ^3H and ^3He (e, e’p) measurements”**
R. Cruz-Torres et al. (Jefferson Lab Tritium Collaboration).
Phys. Lett. B 797, 134890 (2019).
Corresponding author: O. Hen.
26. **“Can long-range nuclear properties Be influenced by short range interactions? A chiral dynamics estimate”**
G.A. Miller, A. Beck, S. May-Tal Beck, L.B. Weinstein, E. Piasetzky and *O. Hen*.
Phys. Lett. B 793, 360 (2019).
25. **“Energy and momentum dependence of nuclear short-range correlations - Spectral function, exclusive scattering experiments and the contact formalism”**
R. Weiss, I. Korover, E. Piasetzky *O. Hen*, and N. Barnea.
Phys. Lett. B 791, 242 (2019).
24. **“Measurement of Nuclear Transparency Ratios for Protons and Neutrons”**
M. Duer and *O. Hen* et al. (CLAS Collaboration).
Phys. Lett. B 797, 134792 (2019).
Corresponding author: O. Hen.
23. **“Rejecting cosmic background for exclusive neutrino interaction studies with liquid Argon TPCs; a case study with the MicroBooNE detector”**
C. Adams et al. (MicroBooNE Collaboration).
Eur. Phys. J. C 79, 673 (2019).
based on analysis lead by: E.O. Cohen, A. Papadopoulou, A. Ashkenazi, E. Piasetzky, and *O. Hen*.
22. **“Probing High Momentum Protons and Neutrons in Asymmetric Nuclei”**
M. Duer and *O. Hen* et al. (CLAS Collaboration).
Nature 560, 617 (2018).
Corresponding author: O. Hen.

21. **“Center of mass motion of short-range correlated nucleon pairs studied via the $A(e, e'pp)$ reaction”**
 E. Cohen and *O. Hen* et al. (CLAS Collaboration).
Phys. Rev. Lett. 121, 092501 (2018).
 Corresponding author: O. Hen.
20. **“Short range correlations and the isospin dependence of nuclear correlation functions”**
 R. Cruz-Torres, A. Schmidt, G. A. Miller, L. B. Weinstein, N. Barnea, R. Weiss, E. Piasezky, and *O. Hen*.
Phys. Lett. B 785, 304 (2018).
19. **“The Nuclear Contacts and Short-Range Correlations in Nuclei”**
 R. Weiss, R. Cruz-Torres, N. Barnea, E. Piasezky, and *O. Hen*
Phys. Lett. B 780, 211 (2018).
 Corresponding author: O. Hen.
18. **“The symmetry energy γ parameter of the consistent relativistic mean-field models”**
 M. Dutra, O. Lourenco, *O. Hen*, E. Piasezky and D.P. Menezes.
Chin. Phys. C 42, 064105 (2018).
17. **“Nucleon-Nucleon Correlations, Short-lived Excitations, and the Quarks Within”**
O. Hen, G.A. Miller, E. Piasezky, and L.B. Weinstein.
Rev. Mod. Phys. 89, 045002 (2017).
16. **“Aspects of charge distribution measurement for $^{252}\text{Cf}(sf)$ ”**
 T. Wang, G. Li, L. Zhu, *O. Hen*, G. Zhang, Q. Meng, L. Wang, H. Han, and H. Xia.
Phys. Rev. C 96, 034611 (2017)
15. **“Hammer events, neutrino energies, and nucleon-nucleon correlations”**
 L. B. Weinstein, *O. Hen*, and E. Piasezky.
Phys. Rev. C 94, 045501 (2016).
14. **“Correlated Fermions in Nuclei and Ultracold Atomic Gases”**
O. Hen, L. B. Weinstein, E. Piasezky, G. A. Miller, M. M. Sargsian, and Y. Sagi.
Phys. Rev. C 92, 045205 (2015).
 Corresponding author: O. Hen.
13. **“Extracting the Mass Dependence and Quantum Numbers of Short-Range Correlated Pairs from $A(e, e'p)$ and $A(e, e'pp)$ Scattering”**
 C. Colle, *O. Hen*, W. Cosyn, I. Korover, E. Piasezky, J. Ryckebusch, and L. B. Weinstein.
Phys. Rev. C 92, 024604 (2015).
12. **“Comment on 'Measurement of 2- and 3-nucleon short range correlation probabilities in nuclei'”**
 D. W. Higinbotham and *O. Hen*.
Phys. Rev. Lett. 114, 169201 (2015).
11. **“Symmetry Energy of Nucleonic Matter with Tensor Correlations”**
O. Hen, W.J. Guo, B.A. Li, L.B. Weinstein, and E. Piasezky.
Phys. Rev. C 91, 025803 (2015).
 Corresponding author: O. Hen.

10. **“Momentum Sharing in Imbalanced Fermi Systems”**
O. Hen et al. (CLAS Collaboration).
Science 346, 614 (2014). Selected for 'Science-Express'.
 Corresponding author: O. Hen.
9. **“Approaching the nucleon-nucleon short-range repulsive core via the $4\text{He}(e,e'pN)$ triple coincidence reaction”**
 I. Korover, N. Muangma, and *O. Hen* et al. (Jefferson Lab Hall-A Collaboration).
Phys. Rev. Lett. 113, 022501 (2014).
8. **“Measurement of Transparency Ratios for Protons from Short-Range Correlated Pairs”**
O. Hen et al. (CLAS Collaboration).
Phys. Lett. B 722, 63 (2013).
 Corresponding author: O. Hen.
7. **“The EMC Effect and High Momentum Nucleons in Nuclei”**
O. Hen, D. W. Higinbotham, G. Miller, E. Piasetzky, and L. B. Weinstein.
Int. J. Mod. Phys. E. 22, 1330017 (2013).
 Corresponding author: O. Hen.
6. **“The EMC effect still puzzles after 30 years” (Cover Paper)**
 D. W. Higinbotham, G. Miller, *O. Hen*, and K. Rith.
CERN Cour. 53N4, 35 (2013).
5. **“New data strengthen the connection between Short Range Correlations and the EMC effect”**
O. Hen, E. Piasetzky, and L. B. Weinstein.
Phys. Rev. C 85, 047301 (2012).
4. **“Investigations of HAVAR[®] Alloy using Positrons”**
 S. May-Tal Beck, W. Anwand, A. Wagner, G. Brauer, A. Beck, A. Ocherashvili, *O. Hen*, S. Harush, Y. Eisen, and D. Moreno.
DDF 331, 95-112 (2012). Chapter in periodical: “Defect and Diffusion Forum”, special issue on: “Near-Surface Depth Profiling of Solids by Mono-Energetic Positrons”.
3. **“Constraints on the Large- x d/u Ratio from Electron-Nucleus Scattering at $x>1$ ”**
O. Hen, A. Accardi, W. Melnitchouk, and E. Piasetzky.
Phys. Rev. D. 84, 117501 (2011).
2. **“Short Range Correlations and the EMC Effect”**
 L. B. Weinstein, E. Piasetzky, D. W. Higinbotham, J. Gomez, *O. Hen*, and R. Shneur.
Phys. Rev. Lett. 106, 052301 (2011).
1. **“Short Range Correlations and the EMC Effect”**
 E. Piasetzky, L. B. Weinstein, D. W. Higinbotham, J. Gomez, *O. Hen*, and R. Shneur.
Nucl. Phys. A 855, 245-248 (2011).

Conferences, Seminars and Colloquia – Or Hen

166 oral presentations given in the form of invited & plenary talks (104) and seminars & colloquia (62).

Invited & Plenary:

104. **“Electron-Nucleus Scattering and Short-Range Correlations: Introduction and Overview”**
Opportunities for SRC studies with New Accelerator Facilities in China, Guangdong, China (November 2023)
103. **“SRC Nucleon Structure - From JLab to EIC”**
Electron Nuclei Interactions at EIC, CFNS, Stony Brook (July 2023)
102. **“Electron, Photon, and Proton Probes of Short-Range Correlations and Their Effects on Nuclear and Nucleon Structure” (APS Fellowship Talk)**
American Physical Society (APS) April Meeting, Minneapolis, USA (April 2023)
101. **“Short-Range Correlations and nPDF Universality”**
4th International Workshop on Quantitative Challenges in SRC & EMC Effect Research, CEA France (January 2023)
100. **“Electron-Nucleus Scattering and Short-Range Correlations: Introduction and Overview”**
4th International Workshop on Quantitative Challenges in SRC & EMC Effect Research, CEA France (January 2023)
99. **“Electron-Nucleus Scattering and Short-Range Correlations: Introduction and (Experimental) Overview”**
4th International Workshop on Quantitative Challenges in Short-Range Correlations and the EMC Effect Research, CEA, Paris-Scalay, France (November 2022)
98. **“At the intersection of low-energy nuclear structure physics: PREX, CREX and Short-Range Correlations”**
Nuclear Physics Long-Range Plan Town Hall Meeting on Nuclear Structure, Reactions, and Astrophysics, Argonne National Lab, Lemont IL, USA (November 2022)
97. **“The ePIC Experiment at the Electron-Ion Collider”**
APCTP Workshop on the Physics of Electron-Ion Collider, Asia Pacific Center for Theoretical Physics, Seoul, Korea (November 2022)
96. **“Overview of Short-Range Correlations Studies”**
9th International Conference on Quarks and Nuclear Physics (QNP2022), Tallahassee FL, USA (September 2022)
95. **“Lepton Scattering in the Era of Precision Neutrino Oscillation measurements”**
Gordon Conference on Photonic Reactions, Holderness School NH, USA (August 2022).
94. **“nuclear-PDFs and the Universality of Short-Range Correlations”**
Workshop on Short Range Correlations at the Intersect of Nuclear and Nucleon Structures, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (August 2022).
93. **“Recent MicroBooNE cross-section results”**
International Conference on High-Energy Physics (ICHEP), Bologna, Italy (July 2022).

92. **“Electron and neutrino interactions for precision oscillation measurements”**
Neutrino Theory Network Workshop, Fermi National Accelerator Lab, Illinois USA (June 2022).
91. **“Electrons-4-Neutrinos (e4ν): Trailblazing the Precision Neutrino Oscillations Era” (Plenary)**
XXX International Conference on Neutrino Physics and Astrophysics (Neutrino 2022), Seoul, South Korea [via zoom] (June 2022).
90. **“Electrons, Neutrinos, and Short-Range Correlations”**
NuSTEC Workshop on Improving the Art of Neutrino-Nuclei Modelling with Charged Lepton Scattering Data, Tel-Aviv, Israel [via zoom] (March 2022).
89. **“Tagged heavy vector-meson production: probing the gluon structure of bound nucleons and nuclei”**
Physics opportunities with an energy upgrade at Jefferson-Lab (J-FUTURE), Messina, Italy [via zoom] (March 2022).
88. **“Electrons-4-Neutrinos: Trailblazing the Precision Neutrino Oscillations Era” (Plenary)**
Moriond ‘22: Electroweak Interactions & Unified Theories, La Thuile, Italy (March 2022).
87. **“QCD, correlations, and the nuclear medium”**
Lake Louise Winter Institute, Lake Louise, Canada (February 2022).
86. **“Electrons for Neutrinos: new results towards precision oscillation measurements”**
Neutrino–Nucleus Interactions in the Standard Model and Beyond, CERN [via zoom] (January 2022).
85. **“Nucleon structure modification from tagged DIS measurements”**
Light Cone 2021: Physics of Hadrons on the Light Front, Jeju island, Korea [via zoom] (November 2021).
84. **“New results on high-momentum neutron-tagged DIS measurement with BAND at CLAS12”**
Conference on Exploring QCD with Tagged Processes, Institut Pascal, University Paris-Saclay, France [via zoom] (October 2021).
83. **“Probing QCD in Nuclei: from Jefferson Lab to the EIC”**
Symposium on QCD and Nuclei, Cambridge, MA (October 2021).
82. **“From quarks to nuclei: unveiling universalities in strongly interacting systems”**
Symposium on Intersection of Nuclear Physics in Japan and the United States, Japan Physical Society (JPS) Fall Meeting (September 2021).
81. **“The EIC Comprehensive Chromodynamics Experiment (ECCE)”**
Electron Ion Collider Users Group Summer Meeting, Virginia Union University, Richmond, VA, and University of California Riverside, Riverside, CA [via zoom] (August 2021).
80. **“The EIC Comprehensive Chromodynamics Experiment (ECCE)”**
Precision Studies of QCD at the Electron-Ion Collider (PSQ@EIC), Asian Pacific Center of Theoretical Physics (APCTP) Pohang, South Korea, and the Center of Frontiers in Nuclear Science (CFNS), Stony Brook, NY [via zoom] (July 2021).
79. **“The EIC Comprehensive Chromodynamics Experiment (ECCE)”**
Saturation and Diffraction at the LHC and the EIC, ECT*, Trento, Italy [via zoom] (June 2021).

78. **“Transparent Virtual Nucleons and Short-Range Correlations”**
 Future Color Transparency and Hadronization Studies at Jefferson Lab and Beyond, Jefferson Lab, Newport News VA [via zoom] (June 2021).
77. **“EMC and SRC research and the 12 GeV Jefferson-Lab program”**
 3rd International Workshop on Quantitative Challenges in EMC and SRC Research, MIT/LNS and Jefferson Lab EIC Center, USA [via zoom] (March 2021).
76. **“EIC Physics and the Yellow Report”**
 1st EIC Comprehensive Chromodynamics Experiment (ECCE) Workshop [via zoom] (February 2021).
75. **“Short Range Correlations and the Quarks Within” (keynote talk)**
 International Symposium on Clustering as a Window on the Hierarchical Structure of Quantum Particles, Beppu city, Kyushu Island, Japan (January 2020).
74. **“Short Range Correlations and the Quarks Within” (Plenary)**
 American Physical Society Division of Nuclear Physics (APS-DNP) Fall Meeting, Washington DC, USA (October 2019).
73. **“From Electrons to Neutrinos: Nuclear Effects in Oscillation Measurements” (Prize Recipient Talk)**
 American Physical Society Division of Nuclear Physics (APS-DNP) Fall Meeting, Washington DC, USA (October 2019).
72. **“e4v: Understanding Neutrino Interactions from Electron Scattering Measurements” (Plenary)**
 21st International workshop on Neutrinos from Accelerators (NUFACT '19), Daegu, Korea (August 2019).
71. **“Modified Structure of Protons and Neutrons in Correlated Pairs”**
 5th International Workshop on the Structure of the Nucleon at Large Bjorken x (HiX2019), Crete, Greece (August 2019).
70. **“Neutron Stars Droplets and the Quarks Within” (Plenary)**
 27th International Nuclear Physics Conference (INCP2019), Glasgow, Scotland (July 2019).
69. **“Constraining the NN Interaction up to 1 GeV/c using Nucleon Knockout Reactions”**
 Ab-Initio Nuclear Theory: From Breakthroughs to Applications, University of Surrey, Guildford, England (July 2019).
68. **“Overview of SRC Studies using (e,e'pN) reactions”**
 XV Elba workshop on Lepton Interactions with Nucleons and Nuclei, Isola d'Elba, Italy (June 2019).
67. **“Short-Range Correlations and Lepton-Nucleus Interactions” (Plenary)**
 Testing and Improving Models of Neutrino Nucleus Interactions in Generators, ECT*, Trento, Italy (June 2019).
66. **“Electrons-4-Neutrinos: What are we measuring and what will it teach us?” (Plenary)**
 Testing and Improving Models of Neutrino Nucleus Interactions in Generators, ECT*, Trento, Italy (June 2019).

65. **“TPCs for Beta Decay Studies”**
Precise beta decay calculations for searches for new physics, ECT*, Trento, Italy (April 2019).
64. **“Overview of SRC studies and new results”**
2nd Workshop on Quantitative Challenges in EMC and SRC Research, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (March 2019)
63. **“New results from Short-Range Correlations and EMC effect studies: EIC Implications”**
Probing Nucleons and Nuclei in High Energy Collisions, Institute for Nuclear Theory (INT), Seattle WA, USA (October 2018).
62. **“Short Range Correlations and Spectroscopic Factors Quenching”**
5th joint meeting of the Nuclear Physics Divisions of the APS and JPS, Hawaii (October 2018).
61. **“Electron scattering constrains to neutrino interactions”**
Electromagnetic Observables for Low-Energy Nuclear Physics, Mainz, Germany (October 2018).
60. **“Short-range correlations: overview of recent results”**
Workshop on short-range nuclear correlations at an Electron-Ion Collider, Center for Frontiers in Nuclear Science (CFNS), Brookhaven National Laboratory, NY USA (August 2018).
59. **“New studies of short-range correlations and the EMC effect” (Plenary)**
22nd European Conference on Few-Body Problems in Physics (EFB22), Caen, France (July 2018).
58. **“Short-Range Correlation and Nuclei and the Generalized Contact Formalism”**
Fundamental Physics with Electroweak Probes of Light Nuclei, Institute for Nuclear Theory (INT), Seattle WA, USA (July 2018).
57. **“Recent progress in the study of Short-Range Correlations”**
13th Conference on Interactions of Particle and Nuclear Physics (CIPANP18), Palm Springs, CA (June, 2018)
56. **“From Nuclei to Neutron-Stars: Short-Range Fermion Correlations”**
3rd Rothschild Colloquium, Institute for advanced studies, Hebrew University, Jerusalem, Israel (May 2018)
55. **“The EMC Effect and Short-Range Correlations: When $1 + 1 \neq 2$ ” (Plenary)**
26th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS-2018), Kobe, Japan (April 2018).
54. **“New Results on Short Range Correlations in Nuclei”**
Nuclear ab-initio Theories and Neutrino Physics, Institute for Nuclear Theory (INT), Seattle WA, USA (March 2018).
53. **“Short Range Correlations: New results and future experiments with Lepton and Hadron Beams”**
Workshop on Hadronic Physics with Lepton and Hadron Beams, Newport News, VA USA (September 2017).

52. **“Digital Positronium Decay”**
Tabletop Experiments with Skyscraper Reach, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (August 2017).
51. **“QCD in Nuclei: Bound Nucleon Structure and Short-Range Correlations”**
APS Division of Particles and Fields (DPF) Summer Meeting, Fermi National Accelerator Lab, Illinois USA (August 2017).
50. **“SRC studies with proton and nuclear beams”**
3rd International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams (QFS-RB 17), York, England (July 2017).
49. **“Short-Range Correlations: Electron Scattering & Effective Theories”**
3rd International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams (QFS-RB 17), York, England (July 2017).
48. **“Probing the NN Interaction and SRC formation process using hard knockout processes”**
International workshop on (e,e'p) processes, Bled, Slovenia (July 2017).
47. **“Short Range Correlations in Heavy Nuclei” (Plenary)**
11th International Workshop on Neutrino-Nucleus Scattering in the Few-GeV Region (NuINT2017), Toronto, Canada (June 2017).
46. **“OLIVIA: 8Li Decay Measurement Using an Optical TPC”**
IAEC-LLNL Workshop on Nuclear Physics, Lawrence Livermore National Laboratory, Livermore CA, USA (May 2017).
45. **“Mining for Quasi Elastic Interactions at JLab – Leveraging Electron and Neutrino Data”**
MicroBooNE Collaboration Meeting, Fermi National Accelerator Lab, Illinois USA (April 2017).
44. **“Short Range Correlations and Nuclear Universality”**
Reactions with Relativistic Radioactive Beams (R³B), GSI Darmstadt, Germany (April 2017).
43. **“New Insights to the Origin of the EMC effect”**
25th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS-2017), Birmingham, England (April 2017).
42. **“Nucleon and Nuclear Structure from Electron Scattering”**
International workshop on Studies of High-Density Nuclear Matter With Hadron Beams, Weizmann Institute, Rehovot Israel (March 2017).
41. **“Short Range Correlations and Geometrical Fluctuations in Nuclei”**
CBM-STAR Joint Workshop, TU Darmstadt, Darmstadt, Germany (March 2017).
40. **“The Jefferson-Lab Tritium Physics Program”**
JLab Hall-A / C Collaboration Meeting, Jefferson Lab, Newport News VA, USA (January 2017).
39. **“Universality in Short-Range Correlations”**
Theoretical Developments in Neutrino-Nucleus Scattering, Institute for Nuclear Theory (INT), Seattle WA, USA (December 2016).

38. **“Overview of SRC Factorization and Universality”**
Quantitative Challenges in EMC and SRC Research, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (December 2016).
37. **“Short-Range Nuclear Structure: From JLab12 to an EIC”**
7th International Conference on Physics Opportunities at an Electron-Ion-Collider (POETIC7), Temple University, Philadelphia (November 2016).
36. **“From Nuclei to Neutron-Stars: Short-Range Fermion Correlations”**
XII Conference on Quark Confinement and the Hadron Spectrum, Thessaloniki, Greece (August 2016).
35. **“Short-Range Nuclear Structure”**
Gordon Conference on Photonuclear Reactions, Holderness School NH, USA (August 2016).
34. **“Short-Range Fermion Correlations: From neV to MeV” (Plenary)**
23rd European Conference on Few-Body Problems in Physics (EFB23), Aarhus, Denmark (August 2016).
33. **“Nuclear and Bound Nucleon Structure Studies at an EIC”**
Electron Ion Collider User Group Meeting, Argonne National Lab, Lemont IL, USA (July 2016).
32. **“Short-Range Correlations and Implications” (Prize Recipient Plenary)**
Jefferson Lab User Group Meeting, Newport News VA, USA (June 2016).
31. **“Short-Range Nuclear Structure and the Nuclear Symmetry Energy”**
6th international symposium on nuclear symmetry energy (NUSYM16), Beijing, China (June 2016).
30. **“The OLIVIA experiment - ‘Trapless’ study of ^8Li beta decay”**
International Conference on Precision Physics of Simple Atomic Systems (PSAS'2016), Hebrew University, Israel (May 2016).
29. **“Nuclear Structure Studies with GlueX”**
Nuclear Photoproduction with GlueX, Jefferson Lab, Newport News, VA (April 2016).
28. **“Opportunities for Short-Range Correlation Studies using Hadronic Beams”**
International Workshop on Opportunities at the Extended Hadron-Hall at J-PARC, Tokai, Japan (March 2016).
27. **“Short-Range Nuclear Structure”**
International Workshop on Progress on J-PARC Hadron Physics in 2016, Tokai, Japan (March 2016).
26. **“Momentum Sharing in Asymmetric Fermi Systems”**
Next-Generation Nuclear Physics with JLab12 and EIC, Miami FL (February 2016).
25. **“Short-Range Correlation and EMC Effect Studies at an EIC”**
Next-Generation Nuclear Physics with JLab12 and EIC, Miami FL (February 2016).
24. **“Correlations in Nuclei”**
54th International Winter Meeting on Nuclear Physics, Bormio, Italy (January 2016).

23. **“Probing Cold Dense Nuclear Matter” (Prize Recipient Plenary)**
Israeli Physical Society (IPS) annual meeting, Bar-Ilan university, Israel (December 2015).
22. **“Correlation Studies via (e,e'2N) Reactions and Implications”**
International Symposium on "High-resolution Spectroscopy and Tensor interactions" (HST15), Nakanoshima Center, Osaka, Japan (November 2015).
21. **“Short-Range Correlations and the Bound Nucleon Structure” (Plenary)**
11th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei (EINN-2015), Paphos, Cyprus (November 2015).
20. **“Studying Short-Range Correlations at the EIC”** (presented by D. Higinbotham)
Mini-Symposium, “Attacking the Nuclear Force at the EIC”, Fall meeting of the APS Division of Nuclear Physics (DNP), Santa-Fe NM, USA (October 2015).
19. **“Correlations, Contact Interactions, and the Nuclear Symmetry Energy”**
EMMI workshop on "Cold dense nuclear matter - from short-range nucleon correlations to neutron stars", GSI Darmstadt, Germany (October 2015).
18. **“SRC and EMC Effects”**
EMMI workshop on "Cold dense nuclear matter - from short-range nucleon correlations to neutron stars", GSI Darmstadt, Germany (October 2015).
17. **“Symmetry Energy of Nucleonic Matter With Tensor Correlations”**
5th International Symposium on Nuclear Symmetry Energy (NUSYM15), Krakow, Poland (July 2015)
16. **“Correlations in Nuclei: Current Status, Implications, and Future Plans”**
Jefferson Lab User Group Meeting, Newport News VA, USA (June 2015).
15. **“Implications of Short-Range Correlations and the Bound Nucleon Structure Function”**
12th Conference on Interactions of Particle and Nuclear Physics (CIPANP15), Vail, Colorado (May 2015)
14. **“Short-Range Correlations in Imbalanced Fermi Systems” (Plenary)**
7th international Conference on Quarks and Nuclear Physics (QNP15), Valparaiso, Chile (March 2015)
13. **“Energy Sharing in Imbalanced Fermi Systems”**
4th CLAS12 European Workshop, Catania, Italy (February 2015)
12. **“Correlation in Nuclei - Moving Beyond the Fermi-Gas Model”**
Theory Meeting Experiment, Neutrinos and Cosmos (TMEX14), Warsaw University, Warsaw, Poland (September 2014)
11. **“Correlations in Asymmetric Interacting Fermi Systems”**
Gordon Conference on Photonic Nuclear Reactions, Holderness School NH, USA (August 2014).
10. **“Studding the Motion of Short-Range Correlated Pairs from A(e,e'pp) Scattering”**
International Workshop on Experimental and Theoretical Topics in CLAS Data Mining, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (August 2014).

9. **“From neV to MeV: Short-Range Fermion Correlations”**
Frontiers and Careers in Photonuclear Physics, Massachusetts Institute of Technology (MIT), Cambridge MA, USA (August 2014).
8. **“Correlations in Heavy Nuclei”**
44th Journées des Actinides, SPCA review lectures, Ein-Gedi, Israel (2014).
7. **“(e,e'p) studies of Mean-Field and Correlated Protons in Asymmetric Nuclei”**
QCD in the Nuclear Medium, Tel-Aviv University, Tel-Aviv, Israel (2013).
6. **“The EMC Effect and Correlated Nucleons”**
QCD in the Nuclear Medium, Tel-Aviv University, Tel-Aviv, Israel (2013).
5. **“Review of EMC/SRC Correlation Studies”**
Nuclear Structure and Dynamics at Short Distances, Institute for Nuclear Theory (INT), Seattle WA, USA (2013).
4. **“Recent Results from Exclusive Studies of Two-Nucleon SRCs”**
Nuclear Structure and Dynamics at Short Distances, Institute for Nuclear Theory (INT), Seattle WA, USA (2013).
3. **“Short Range Correlations and the EMC Effect”**
Gordon Conference on Photonuclear Reactions, Holderness School NH, USA (2012).
2. **“Short Range Structure of Nuclei”**
Jefferson Lab User Group Meeting, Newport News VA, USA (2012).
1. **“Mining for Proton-Proton Correlations”**
International Workshop on Short Range Correlations and Hard QCD Phenomena, ECT*, Trento, Italy (2011).

Seminars and Colloquia:

62. **“EIC physics: Experimental Perspectives” (Summer School Lecture Series)**
University of Connecticut, Storrs CT, USA (August 2023).
61. **“From QCD to Visible Matter: An Insight into the U.S. Electron-Ion Collider”**
Karlsruhe Institute of Technology, KIT Center Elementary Particle and Astroparticle Physics (KCETA) Colloquium, Karlsruhe, Germany (June 2023).
60. **“Strong Interactions and Bound Nucleon Structure: From JLab to the EIC”**
Stony Brook University, Center for Frontiers in Nuclear Science (CFNS) Seminar, Stony Brook, NY, USA (June 2023).
59. **“Neutron Star Droplets and the Quarks Within”**
Washington University in St. Louis, Physics Department Colloquium, St. Louis MO, USA (December 2022)
58. **“QCD and Nuclei”**
Massachusetts Institute of Technology, Physics Department Colloquium, Cambridge MA, USA (November 2022).

57. **“Neutron Star Droplets and the Quarks Within”**
Massachusetts Institute of Technology, Pappalardo 20th Anniversary Physics Department Colloquium, Cambridge MA, USA (April 2022).
56. **“The Electron-Ion Collider: Science program & detector development opportunities”**
Ben-Gurion University, Israeli Joint Nuclear Seminar, Beer-Sheva, Israel [via zoom] (April 2022).
55. **“Hadronic Physics, Quantum Chromodynamics, and the nuclear medium”**
UK STFC summer school, Durham, UK (March 2022).
54. **“Electrons-4-Neutrinos: Trailblazing the Precision Neutrino Oscillations Era”**
Harvard University, Laboratory for Particle Physics and Cosmology Seminar, Cambridge MA, USA (March 2022).
53. **“The quest to understand the fundamental structure of matter – outlook to the U.S. Electron-Ion Collider”**
Joint Institute for Nuclear Research, Veksler and Baldin Laboratory of high-energy physics seminar (January 2022).
52. **“Neutrino Oscillations and Interactions”**
University of Ljubljana, Physics Department Colloquium, Ljubljana, Slovenia [via zoom] (November 2021).
51. **“From quarks to nuclei: unveiling universalities in strongly interacting systems”**
Rice University, Physics Department Colloquium, Houston, Texas (November 2021).
50. **“From quarks to nuclei: unveiling universalities in strongly interacting systems”**
Carnegie Mellon University and University of Pittsburgh, Physics Departments joint Colloquium, Pittsburgh, PA (October 2021).
49. **“QCD and Nuclei”**
Weizmann Institute, Particle and Astrophysics Department Seminar, Rehovot, Israel (October 2021).
48. **“The U.S. Electron Ion Collider (EIC): Physics Program and Local Opportunities”**
Tel-Aviv University, Physics Department Seminar, Tel-Aviv, Israel [via zoom] (March 2021).
47. **“From quarks to nuclei: unveiling universalities in strongly interacting systems”**
University of Washington, Physics Department Colloquium, Seattle WA, USA [via zoom] (March 2021).
46. **“Unveiling universality in strongly interacting (nuclear) systems”**
Tel-Aviv University, Physics Department Colloquium, Tel-Aviv, Israel [via zoom] (October 2020).
45. **“From Electron to Hadron Beams: Advances in Short-Range Correlations Studies”**
FRIB Theory Alliance Colloquium, Facility for Radioactive Ion Beams (FRIB), East Lansing MI, USA [via zoom] (September 2020).
44. **“Nuclear correlation via electron beams” (Invited lecture series)**
19th CNS International Summer School, Tokyo, Japan [via zoom] (August 2020).
43. **“Many-body factorization and new measurements of short-range correlations”**
Institute for Nuclear Theory (INT), S@INT Seminar, Seattle WA, USA [via zoom] (June 2020).

42. **“New Results on Short-Range Correlations from 48 GeV/c $^{12}\text{C}+p$ Reactions - from the Nuclotron to FAIR and the EIC”**
Brookhaven National Lab, Nuclear Physics Seminar, Upton NY, USA [via zoom] (May 2020).
41. **“New results from measurements of short-range correlations in nuclei - from the Nuclotron to FAIR”**
GSI-FAIR Colloquium, Darmstadt, Germany [via zoom] (May 2020).
40. **“Short Range Correlations and the Quarks Within”**
RIKEN Radioactive Beam Factory Laboratory (RIBF), Nuclear Physics Seminar, Tokyo, Japan (January 2020).
39. **“Electron Scattering Constraints on Neutrino Interactions and Oscillation Analyses”**
Tokyo Institute of Technology, Physics Department Seminar, Tokyo, Japan (January 2020).
38. **“Short Range Correlations and the Quarks Within”**
Tokyo Institute of Technology, Physics Department Seminar, Tokyo, Japan (January 2020).
37. **“Short Range Correlations and the Quarks Within”**
Michigan State University, NSCL/FRIB Nuclear Science Seminar, East Lansing MI, USA (November 2019).
36. **“Neutron Stars Droplets and the Quarks Within”**
University of Kentucky, Physics Department Colloquium, Lexington KY, USA (October 2019).
35. **“Neutron Stars Droplets and the Quarks Within”**
Argonne National Laboratory, Physics Division Colloquium, Lemont IL, USA (September 2019).
34. **“Neutron Stars Droplets and the Quarks Within”**
University of Virginia, Physics Department Colloquium, Charlottesville VA, USA (September 2019).
33. **“Neutron Stars Droplets and the Quarks Within”**
Technical University of Munich, Strong Interaction Physics Seminar, Munich, Germany (June 2019).
32. **“Neutron Stars Droplets and the Quarks Within”**
Lawrence Berkeley National Lab, Nuclear Science Division Colloquium, Berkeley CA, USA (February 2019).
31. **“Neutron Stars Droplets and the Quarks Within”**
Texas A&M University, Cyclotron Institute Colloquium, College Station TX, USA (November 2018).
30. **“Short-Ranged Correlations and the Bound Nucleon Structure”**
University of Pennsylvania, Physics Department Seminar, Philadelphia PA, USA (November 2018).
29. **“Neutron Stars Droplets and the Quarks Within”**
Massachusetts Institute of Technology, Laboratory for Nuclear Science Colloquium, Cambridge MA, USA (September 2018).

28. **“Short-Ranged Correlations and the Bound Nucleon Structure”**
Yale University, Wright Laboratory seminar, New Haven CT, USA (August 2018).
27. **“Fluctuating Nucleons in Asymmetric Nuclei”**
University at Albany, Physics Department Colloquium, Albany NY, USA (April 2018).
26. **“Fluctuating Nucleons in Asymmetric Nuclei”**
University of Connecticut, Physics Department Colloquium, Storrs CT, USA (February 2018)
25. **“Short Range Correlations and Nuclear Universality”**
Technical University Darmstadt, Physics Department Colloquium, Darmstadt, Germany (February 2018).
24. **“Fluctuating Nucleons in Asymmetric Nuclei”**
Technical University Darmstadt, Nuclear Physics Seminar, Darmstadt, Germany (February 2018).
23. **“Superdense nuclear matter and QCD”**
Massachusetts Institute of Technology, Women in Physics IAP Colloquium, Cambridge MA, USA (January 2018).
22. **“Short Range Correlations and Nuclear Universality”**
Duke University, Triangle Universities Nuclear Laboratory (TUNL) seminar, Durham NC, USA (September 2017).
21. **“Long and Short Range Nuclear Structure” (Invited lecture series)**
Thomas Jefferson National Lab, 32nd HUGS Summer School Program, Newport News VA, USA (June 2017).
20. **“SRC Studies: Current Status and Future Plans”**
Oak Ridge National Laboratory, Physics Division seminar, Oak Ridge TN, USA (May 2017).
19. **“From Cold Atoms to Nuclei: Universal Physics at Short distances”**
Ohio University, Physics Department Colloquium, Athens OH, USA (October 2016).
18. **“Short-Range Fermion Correlations: From neV to MeV”**
University of Michigan, Physics Department Seminar, Ann Arbor MI, USA (October 2016).
17. **“Short-Range Nuclear Structure and Neutrino-Nucleus Interactions”**
Fermi National Accelerator Lab, Joint Experiment and theory Seminar, Batavia IL, USA (April 2016).
16. **“From neV to MeV: Short-Range Fermion Correlations”**
Brookhaven National Lab, Physics Department Colloquium, Upton NY, USA (January 2016).
15. **“Short-Range Correlations in Nuclei – Current Status and Future Perspectives”**
Brookhaven National Lab, Physics Department joint Experiment and Theory Seminar, Upton NY, USA (January 2016).
14. **“Probing Super Dense Nuclear Matter”**
Washington University in St. Louis, Nuclear Physics Seminar, St. Louis MO, USA (December 2015)

13. **“Reactor production of ^8Li nuclei for sterile neutrino searches”**
Tel-Aviv University, Particle Physics Seminar, Tel-Aviv, Israel (June 2015)
12. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Tel-Aviv University, Physics Department Colloquium, Tel-Aviv, Israel (May 2015)
11. **“Experimental Study of Short-Range Correlations in Nuclei”**
Joint Institute for Nuclear Research (JINR), Physics Colloquium, Dubna, Russia (March 2015)
10. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Hebrew University, Israeli Joint Nuclear Seminar, Jerusalem, Israel (March 2015).
9. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Massachusetts Institute of Technology, Laboratory for Nuclear Science (LNS) Colloquium, Cambridge MA, USA (February 2015).
8. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Thomas Jefferson National Laboratory, Physics Seminar, Newport-News VA, USA (November 2014).
7. **“Short-Range Correlations in Imbalanced Fermi Systems”**
University of Washington, CENPA Physics Seminar, Seattle WA, USA (November 2014).
6. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Michigan State University, NSCL Physics Seminar, East Lansing MI, USA (November 2014).
5. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Rutgers University, Physics Department Seminar, New Brunswick NJ, USA (November 2014).
4. **“Short-Range Correlations in Imbalanced Fermi Systems”**
Argonne National Lab, Physics Division Seminar, Lemont IL, USA (August 2014).
3. **“Deep in the Nucleus: a puzzle revisited”**
Tel-Aviv University, Particle Physics Seminar, Tel-Aviv, Israel (May 2013).
2. **“Measurement of Transparency Ratios for Protons from Short-Range Correlated Pairs”**
Weizmann Institute, Israeli Joint Nuclear Seminar, Rehovot, Israel (November 2012).
1. **“The EMC Effect, Short-Range Correlations, and the Free Neutron Structure Function”**
Tel-Aviv University, Particle Physics Seminar, Tel-Aviv, Israel (October 2010).