

Curriculum Vitae

Name: Or Hen

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

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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 Young Scientist Prize in Nuclear Physics	2019
NEC Corporation Fund Award	2019
Guido Altarelli Award	2018
Amar G. Bose Fellow	2018
Intensity Frontier Fellow (FANL)	2016 - 2018
Jefferson Science Associates (JSA) Graduate Thesis Prize	2016
Israeli Physical Society (IPS) prize for graduate research in Experimental Physics	2015
Pappalardo Fellow (MIT)	2015 - 2017
Rothschild Fellow, 'Yad-Hanadiv' foundation	2015 - 2016
Israeli Council for Higher Education, Amnon Pazi Award	2013
Tel-Aviv University, Juda Eisenberg Award	2011

Talks: 159 oral presentations given in the form of invited & plenary talks (100) and seminars & colloquia (59), see full list below.

Professional 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 ('25) and Vice-Chair ('24), APS Stuart J. Freedman Award selection committee	Spring '23 - Present
	• LOC Chair, Organizing Committee Member, and Writing Committee Member, NSAC Long-Range Plan Town Hall Meeting on Hot and Cold QCD and resulting community White Paper	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
	• Member, APS Committee on Scientific Meetings	2022 – 2024
	• 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' 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	• Journal Reviewer: PRL, Nature, Science, PLB, PRD, PRC, NIM-A, and others	
	• 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	• Convener, third 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, 4 th 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, 9 th International Conference on Quarks and Nuclear Physics (QNP22), for the topic “Short Range Correlations” (Tallahassee, FL)	Sep. ‘22
	• Chair, local organizing committee, APS Division of Nuclear Physics (APS-DNP) Fall Meeting (Boston, MA)	Oct. ‘21
	• Co-Chair, Symposium on QCD and Nuclei (Boston, MA)	Oct. ‘21
	• Co-Chair, 3 rd International Workshop on Quantitative Challenges in EMC and SRC Research (Newport News, VA)	March ‘21
	• Member, organizing committee, 4 th International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams (QFS-RB19) (Maresias, Brazil)	Oct. ‘19
	• Chair, 2 nd 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	<p><u>Electron-Ion Collider (Brookhaven National Lab and Thomas Jefferson National Lab):</u></p> <ul style="list-style-type: none"> • Collaboration Formation Steering Committee Member, ePIC Collaboration May '22 – Feb. '23 • Co-Founder and Steering Committee Member, ECCE Consortium Feb. '21 – May '22 <p><u>Thomas Jefferson National Lab (spokesperson):</u></p> <ul style="list-style-type: none"> • Data-Mining Collaboration 2017 – 2020 • 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 <p><u>Joint Institute for Nuclear Research (spokesperson):</u></p> <ul style="list-style-type: none"> • Study of Short-Range Correlation in Inverse Kinematics at BM@N <p><u>GSI Helmholtz Centre for Heavy Ion Research (spokesperson):</u></p> <ul style="list-style-type: none"> • First characterization of Short-Range Correlations in exotic nuclei at R3B
Collaboration Membership	<ul style="list-style-type: none"> • ePIC, ECCE consortium, Electron Ion Collider Users Group, • Jefferson Lab Users Group, Hall A, Hall C, CLAS, CLAS12, and Data-mining, • Electrons-for-Neutrinos (founding member), • MicroBooNE (Fermilab), • BM@N (JINR), • R³B (GSI), • GENIE.
Academic Service	<p><u>MIT / Institute:</u></p> <ul style="list-style-type: none"> • Advisor, freshman academic advising program Fall '19 – Spring '21 • Advisor, 8.01 advising program Fall '22 – Spring '23 • Advisor, 8.01 advising program Fall '20

MIT / Physics Department:

- Member, faculty search committee (NuPaX division) **Fall '21 – Spring '22**
Fall '22 – Spring '23
- Member, Pappalardo Fellowship executive Committee **Fall '22**
- Faculty liaison, departmental postdoc association **Spring '19 – Present**
- Chair and section lead for quantum mechanics, written graduate qualifying exam committee **Spring '22 – Present**
- Member and section lead for quantum mechanics, written graduate qualifying exam committee **Fall '18 – IAP '22**
- Chair, Ad-Hoc committee on graduate core requirements fulfilment review **Spring '23**
- Member, Ad-Hoc committee on graduate core requirements scope review **Spring '23**
- Member, strategic plan committee (NuPaX Division) **Spring '21 – Fall '21**
- Interviewer, graduate admissions (NuPaX division) **IAP '22**
- Chair, oral graduate qualifying exam committee (NuPaX Division) **Fall '20 – Spring '21**
- Member, oral graduate qualifying exam committee (NuPaX Division) **Fall '18 – Spring '20**
- Advisor, undergraduate and graduate students academic advising **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**

MIT / 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**
- Chair, colloquium committee **Spring '20 – Present**
- Member, colloquium committee **Fall '18 – Fall '19**
- Member, lunchtime seminar committee **Fall '18 – Spring '20**

MIT External:

- Member, William & Mary Collage graduate thesis examination committee, Luis Zazueta **Spring '22**
- 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 Summer School (Sheffield, UK), course on “Hadronic Physics”	March '22
	• Lecturer, 19 th CNS International Summer School (Tokyo Japan), course on “Nuclear correlations via electron beams”	Aug. '20
• Lecturer, 32 nd HUGS summer school program (Newport News VA), course on “Long- and short-range nuclear structure”	July '17	

Mentoring:

(Former members dates represent time period with the group.
Employment information is next / last known position)

Graduate Students

Current:

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

Former:

- | | |
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| 5. Dr. Efrain Segarra | July '16 – June '22 |
| <u>Current Position:</u> Postdoctoral Fellow, Paul Scherrer Institute (PSI). | |
| <u>Dissertation:</u> 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: Postdoc, UC Berkeley.
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 CFNS and Stony Brook University)
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]
9. Dr. Joshua Barrow **June '21 – Present**
 [Zuckerman Fellow]

Former:

8. Dr. Nathaly Santiesteban **Oct. '20 – Jan. '22**
 Assistant Professor, University of New Hampshire
 [MIT School of Science Fellow]
7. Dr. Florian Hauenstein **Sep. '19 – Oct. '21**
 Staff Scientists, Thomas Jefferson National Accelerator Facility
 [JSA Promising Young Scientist Award]
6. Dr. Adi Ashkenazi **Sep. '17 – Oct. '20**
 Assistant Professor (senior lecturer), Tel-Aviv University
 [G. Altarelli Award; Tollestrup Award; FNAL Intensity Frontier Fellow; National Postdoctoral Award for Advancing Women in Science; Zuckerman STEM Leadership Fellow]

	5.	Dr. Holly Szumila-Vance	Staff Scientists, Thomas Jefferson National Accelerator Facility	Jan. '20 – June '20
	4.	Dr. Dien Nguyen	Assistant Professor, University of Tennessee (starting Jan. '24)	March '19 – June '20
		[Nathan Isgur Fellow]		
	3.	Dr. 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	Aug. '20 – Aug. '22
		[Paglia Research Fellow]		
	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
Undergrad Students (MIT UROP Program)	13.	Ms. Anjali Nambrath	Graduate student, UC Berkley	Fall '17 – Fall '18; Spring '19 – Spring '21
			<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]	
	12.	Mr. Oluwaseun Ogunde		IAP '18; Summer '18; Spring '20 – Fall '21
	11.	Mr. Samuel Solomon	Graduate student, Caltech	Spring '19 – Spring '20
			[APS CEU Fellowship; 2020 MIT Chemistry Department Award for outstanding research achievements]	
	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

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| 6. | Mr. Ting-Chun Lin | | Fall '17 – Spring '19 |
| 5. | Ms. Kirsten Surrao | Graduate student, Columbia University
[APS CEU Fellowship] | Fall '17 – Summer '18 |
| 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
[APS CEU Fellowship] | Fall '18 – Summer '19 |
| 1. | Mr. Adrian Silva | [APS CEU Fellowship; Paul E. Gray (1954) Endowed Fund for UROP project] | Fall '17 – Fall '18 |

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:

72. “Short-Ranged Nucleon-Nucleon Correlations”

O. Hen

Physics Reports (Ed. M.J. Ramsey-Musolf), to be submitted in late 2022.

71. “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), to be submitted in late 2022.

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]

70. “Multi-Differential Cross Section Measurements of ν_{μ} -Argon Quasielastic-like Reactions with the MicroBooNE Detector”

P. Abratenko et al. (MicroBooNE Collaboration).

arXiv: 2301.03700

Based on analysis lead by A. Papadopoulou (MIT), A. Ashkenazi (TAU), and *O. Hen* (MIT).

69. “First double-differential measurement of kinematic imbalance in neutrino interactions with the MicroBooNE detector”

P. Abratenko et al. (MicroBooNE Collaboration).

arXiv: 2301.03706

Based on analysis lead by A. Papadopoulou (MIT), A. Ashkenazi (TAU), and *O. Hen* (MIT).

68. “First 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).

arXiv: 2209.01492

Corresponding author: O. Hen.

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

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

arXiv: 2209.02580

66. “Design and Simulated Performance of Calorimetry Systems for the ECCE Detector at the Electron Ion Collider”

F. Bock et al. (ECCE Consortium)

arXiv: 2207.09437

65. “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)

arXiv: 2208.14575

64. “Open Heavy Flavor Studies with the ECCE Detector at the Electron Ion Collider”
X. Li et al. (ECCE Consortium)
arXiv: 2207.09437
63. “Search for $e \rightarrow \tau$ Charged Lepton Flavor Violation at the EIC with the ECCE Detector”
J.-L. Zhang et al. (ECCE Consortium)
arXiv: 2207.10261
62. “ECCE unpolarized TMD measurements”
R. Seidl et al. (ECCE Consortium)
arXiv: 2207.10893
61. “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.
60. “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. Piasetzky, and *O. Hen*.
arXiv: 2104.05090
Corresponding author: O. Hen.

Published:

59. “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.
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 various studies and via convenorship work for the Diffraction and Tagging physics working group
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. Piassetzky, 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. Furlletova, *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 ν 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. Piassetzky, 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).
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36. **“Neutron valence structure from nuclear deep inelastic scattering”**
 E.P. Segarra, A. Schmidt, T. Kutz, D.W. Higinbotham, E. Piasezky, 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 $^4\text{He}(e,e’p\text{N})$ Reaction”**
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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.
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33. **“Nucleon-nucleon correlations and the single-particle strength in atomic nuclei”**
 S. Paschalis, M. Petri, A.O. Macchiavelli, *O. Hen*, and E. Piasezky.
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32. **“Laser Calibration System for Time of Flight Scintillator Arrays”**
 A.W. Denniston, E.P. Segarra, and M.O. Ivenboim et al.
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31. **“The CLAS12 Backward Angle Neutron Detector (BAND)”**
 E.P. Segarra, F. Hauenstein, and A. Schmidt et al.
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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).
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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).
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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).
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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).
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22. “Probing High Momentum Protons and Neutrons in Asymmetric Nuclei”
M. Duer and *O. Hen* et al. (CLAS Collaboration).
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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. Piasetzky, 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. Piasetzky, and *O. Hen*
Phys. Lett. B 780, 211 (2018).
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18. “The symmetry energy γ parameter of the consistent relativistic mean-field models”
M. Dutra, O. Lourenco, *O. Hen*, E. Piasetzky and D.P. Menezes.
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17. **“Nucleon-Nucleon Correlations, Short-lived Excitations, and the Quarks Within”**
O. Hen, G.A. Miller, E. Piasezky, and L.B. Weinstein.
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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).
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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. Piasezky, and L. B. Weinstein.
Int. J. Mod. Phys. E. 22, 1330017 (2013).
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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. Piassetzky, 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. Piassetzky.
Phys. Rev. D. 84, 117501 (2011).
2. **“Short Range Correlations and the EMC Effect”**
L. B. Weinstein, E. Piassetzky, 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. Piassetzky, 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

159 oral presentations given in the form of invited & plenary talks (100) and seminars & colloquia (59).

Confirmed:

105. **“From Gluons to Nuclei: Physics at the U.S. Electron-Ion Collider and the ePIC Detector”**
Karlsruhe Institute of Technology, Particle Physics Colloquium, Karlsruhe, Germany (June 2023).
104. **“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).
103. **“EIC physics: Experimental Perspectives” (Summer School Lecture Series)**
University of Connecticut, Storrs CT, USA (August 2023).
102. **“Strong Interactions and Bound Nucleon Structure: From JLab to the EIC”**
Purdue University, Nuclear and High-Energy Physics Seminar, West Lafayette, IN, USA (September 2023).
101. **“Hard Reactions and Short Ranged Correlations: Recent Results and Future Directions”**
5th International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams, Lefkada, Greece (October 2023).

Invited & Plenary:

100. **“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).
99. **“Electron-Nucleus Scattering and Short-Ranged 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 Nuclear 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 Photonuclear Reactions, Holderness School NH, USA (August 2014).
10. **“Studying 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:

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”**
Join 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 $^{12}\text{C}+\text{p}$ 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).