

# Curriculum Vitae

**Name:** Or Hen

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

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## **Education:**

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

## **Professional Experience:**

Associate Professor, Physics Department, MIT	<b>2021 - Present</b>
Assistant Professor, Physics Department, MIT	<b>2017 - 2021</b>
Pappalardo Post-Doctoral Fellow, MIT	<b>2015 - 2017</b>
Experimental Physicist, IDF General Corps	<b>2009 - 2015</b>
Provisioning engineer, FTL lab, Intel	<b>2007 - 2009</b>

## **Fellowships and Awards:**

Class of 1956 Career Development Professorship Chair (MIT)	<b>2021 - 2024</b>
Alfred P. Sloan Research Fellow	<b>2020</b>
APS Stuart J. Freedman Award	<b>2019</b>
U.S. DOE Office of Science Early Career Award	<b>2019</b>
IUPAP Young Scientist Prize in Nuclear Physics	<b>2019</b>
NEC Corporation Fund Award	<b>2019</b>
G. Altarelli Award	<b>2018</b>
Amar G. Bose Fellow	<b>2018</b>
Intensity Frontier Fellow, Fermi National Accelerator Laboratory (FANL)	<b>2016 - 2018</b>
JSA (Jefferson Science Associates) Graduate Thesis Prize	<b>2016</b>
IPS (Israeli Physical Society) prize for graduate research in Experimental Physics	<b>2015</b>
Pappalardo Fellow, MIT	<b>2015 - 2017</b>
Rothschild Fellow, 'Yad-Hanadiv' foundation	<b>2015 - 2016</b>
A. Pazi Award, Israeli Council for Higher Education	<b>2013</b>
J. Eisenberg Award, Tel-Aviv University	<b>2011</b>

**Talks:** 133 oral presentations given in the form of invited & plenary talks (83) and seminars & colloquia (50), see full list below.

## **Professional Activities:**

Community Service & Outreach	• Member, APS Committee on Scientific Meetings	2022 – 2024
	• Convener, Electron-Ion Collider Community Yellow-Report, Physics 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
	• MIT representative, APS Conference for Undergraduate Women in Physics (CUWiP)	(Multiple Years)
	• Scientific advisor, Nova documentary series on the physics of atoms and nuclei	2018
Journal Editorial & Review	• Journal Reviewer: Nature, Science, PRL, PLB, PRC, NIM, NPA, EPJA, and others	
	• Funding Agencies Reviewer: NSF, BSF, CSF, and Pazi Foundation	
	• Editor, Modern Physics Letters A (MPLA)	2020 – present
	• Editor, International Journal of Modern Physics A (IJMPA)	2020 – present
	• Review Editor and Editorial Board Member, Frontiers in Physics, Nuclear Physics section	2020 – present
	• Editor, Special issue on 'Symmetry in Nuclear Physics', MDPI Symmetry	ongoing
	• Reviewer, APS Conference Experience for Undergraduates (CUE) program	multiple years
Conference Organization	• Member, organizing committee, Workshop on Opportunities with JLab energy and luminosity upgrade (ECT*, Trento, Italy)	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 <sup>rd</sup> International Workshop on Quantitative Challenges in EMC and SRC Research (Newport News VA)	March '21
	• Member, organizing committee, 4 <sup>th</sup> International Workshop on Quasi-Free Scattering with Radioactive-Ion Beams (QFS-RB19) (Maresias, Brazil)	Oct. '19

- Chair, 2<sup>nd</sup> 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

Brookhaven National Lab and Thomas Jefferson National Lab:

- Member, Steering Committee, EIC Comprehensive Chromodynamics Experiment (ECCE) 2021 – present

Thomas Jefferson National Lab:

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

Joint Institute for Nuclear Research (JINR):

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

GSI Helmholtz Centre for Heavy Ion Research (GSI):

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

Collaboration Membership

- ECCE consortium, Electron Ion Collider Users Group,
- Jefferson Lab Hall A, Hall C, CLAS, CLAS12, and Data-mining,

- Electrons-for-Neutrinos (founding member),
- MicroBooNE (Fermilab),
- BM@N (JINR),
- R<sup>3</sup>B (GSI),
- GENIE.

#### MIT Service

##### Institute:

- Advisor, freshman academic advising program Fall '19 – Spring '21
- Advisor, 8.01 advising program Fall '20

##### Physics Department:

- Member, faculty search committee (NuPaX division) Fall '21 – Spring '22
- Faculty liaison, postdoc association Spring '19 – Present
- Member and section lead, graduate written qualifying exam committee, quantum mechanics section Fall '18 – Present
- Member, strategic plan committee (NuPaX Division) Spring '21 – Fall '21
- Chair, graduate qualifying oral exam committee (NuPaX Division) Fall '20 – Spring '21
- Member, graduate qualifying oral 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
- Member, Graduate thesis committee, Yimin Wang Fall '20 – Fall '21
- Member, Graduate thesis committee, Julian Picard Spring '21 – Fall '21
- Organizer, Faculty lunchtime science meeting series Spring '20 – Present

##### Laboratory for Nuclear Science (LNS):

- Co-chair, taskforce on diversity equity and inclusion Summer '20 – Present
- Member, COVID-19 monitoring and 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

#### Teaching

- MIT 8.01, Classical Mechanics Fall '17, '19, '20
- MIT 8.711, Graduate Nuclear Physics Spring '18, '19, '20, '21
- MIT 8.13, Junior Physics Lab Fall '18
- Hebrew University 77613, Simulation of Transport of Particles and Radiation Fall '08
- Lecturer, 19<sup>th</sup> CNS International Summer School (Tokyo Japan), course on “Nuclear correlations via electron beams” Aug. '20

- Lecturer, 32<sup>nd</sup> HUGS summer school program (Newport News VA), course on “Long- and short-range nuclear structure” July ‘17

## Mentoring:

### Graduate Students

#### Current:

- Ms. Afroditi Papadopoulou July ‘16 – Present  
 [Lourie Fellow ‘16; Henry Kendall (1955) Fellow ‘16; URA Fellow ‘17, ‘19, ‘20; George and Marie Vergottis Fellow ‘21]
- Mr. Efrain Segarra July ‘16 – Present  
 [NSF Fellow; Ford Foundation Fellow]
- Mr. Andrew Denniston Sep. ‘18 – Present
- Mr. Jackson Pybus Sep. ‘18 – Present  
 [JLab EIC Center Fellow ‘20, ‘21]
- Ms. Hang Qi Sep. ‘20 – Present  
 [MIT Presidential Fellow ‘20]
- Ms. Allen Magdalena Jan. ‘21 – Present  
 [NSF Fellow]
- Ms. Natalie Wright Sep. ‘21 – Present
- Mr. Jason Phelan Sep. ‘21 – Present

#### Former:

- 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]
- Dr. Barak Schmookler Sep. ‘15 – July ‘18  
Current Position: Postdoc, Stony-brook Center for Frontiers in Nuclear Physics  
Dissertation: Nucleon Structure and Its Modification in Nuclei
- 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:

- Dr. Tyler Kutz Dec. ‘19 – Present  
 [Zuckerman Fellow]
- Dr. Julian Kahlbow Jan. ‘20 – Present
- Dr. Justin Estee Oct. ‘20 – Present
- Dr. Nathaly Santiesteban Oct. ‘20 – Present  
 [MIT School of Science Fellow]
- Dr. Igor Korover Nov. ‘20 – Present
- Dr. Joshua Barrow June ‘21 – Present  
 [Zuckerman Fellow]

Former:

	Dr. Florian Hauenstein	Staff Scientists, Thomas Jefferson National Accelerator Facility	Sep. '19 – Oct. '21
		[JSA Promising Young Scientist Award]	
	Dr. Adi Ashkenazi	Assistant Professor (senior lecturer), Tel-Aviv University	Sep. '17 – Oct. '20
		[Tollestrup Award; FNAL Intensity Frontier Fellow; National Postdoctoral Award for Advancing Women in Science; Zuckerman STEM Leadership Fellow]	
	Dr. Holly Szumila-Vance	Staff Scientists, Thomas Jefferson National Accelerator Facility	Jan. '20 – June '20
	Dr. Dien Nguyen	Nathan Isgur Fellow, Thomas Jefferson National Accelerator Facility	March '19 – June '20
	Dr. Axel Schmidt	Assistant Professor, George Washington University	Sep. '16 – Dec. '19
	Dr. Maria Patsyuk	Staff Scientists, Joint Institute for Nuclear Research	June '17 – June '19
	Dr. Georgios Laskaris	Consultant, Ab-Initio Software	Sep. '16 – May '18
Post-baccalaureate researchers	Mr. Alex Kiral		Aug. '20 – present
		[Paglia Research Fellow]	
	Ms. Natalie Wright	Graduate student, MIT	June '20 – Aug. '21
	Mr. Adin Hrnjic	Graduate student, UIUC	June '18 – May '19
Visiting Scientists	Dr. Ehoud Pazy	IAEC Israel	Oct. '21 – Sep. '22
	Dr. Sharon Mey-Tal Beck	IAEC Israel	Sep. '17 – Aug. '18
	Dr. Arie Beck	IAEC Israel	Sep. '17 – Aug. '18
	Prof. Taofeng Weng	Beihang University, China	Sep. '16 – Aug. '17
Undergrad Students (MIT UROP Program)	Ms. Anjali Nambrath	Graduate student, U.C. 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, Malcolm Cotton Brown Award; Phi Beta Kappa Member]	
	Mr. Oluwaseun Ogunde		IAP '18; Summer '18; Spring '20 – Fall '21

Mr. Samuel Solomon	Graduate student, Caltech [APS CEU Fellowship; 2020 MIT Chemistry Department Award for outstanding research achievements]	Spring '19 – Spring '20
Mr. Hector Iglesias	Graduate student, Rice University	Fall '19 – Spring '20
Mr. Adin Hrnjic	Graduate student, UIUC	Summer '16 – Spring '18
Mr. Connor Chung		IAP '17 – May '17
Mr. Sean Gloumeau	EMJMD scholar, European Master program in Embedded Computing Systems	Summer '17 – IAP '18
Mr. Ting-Chun Lin		Fall '17 – Spring '19
Ms. Kirsten Surrao	Graduate student, Columbia University [APS CEU Fellowship]	Fall '17 – Summer '18
Mr. Joseph Iosue	Graduate student, University of Maryland	Fall '17 – Fall '18
Mr. Yong-Hui Lim		Fall '17 – Spring '18
Ms. Peninah Levine	Graduate student, MIT [APS CEU Fellowship]	Fall '18 – Summer '19
Mr. Adrian Silva		Fall '17 – Fall '18
	[APS CEU Fellowship; Paul E. Gray (1954) Endowed Fund for UROP project]	

## Selected Publications – Or Hen

The listed below include those publications that I co-author and report on work led / co-led by myself and my group. It does not include ~50 ‘collaboration publications’ that I co-authored but did not make a direct and significant contribution to.

### Forthcoming commissioned articles:

#### 58. “Short-Ranged Nucleon-Nucleon Correlations”

*O. Hen*

Physics Reports (Ed. M.J. Ramsey-Musolf), to be submitted in 2021.

#### 57. “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 2021.

### 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](http://www.hen-lab.com/publications)]

#### 56. “New scaling measurements map the transition from single-particle to correlated-pair dominance in atomic nuclei”

I. Korover, A.W. Denniston, A. Schmidt, A. Kiral, A. Lovato, N. Rocco, L.B. Weinstein, E. Piassetzky, and *O. Hen* et al. (CLAS Collaboration).

Corresponding author: O. Hen.

#### 55. “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.

**arXiv: 2109.09509**

#### 54. “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*.

**arXiv: 2109.14524**

\*Equal Contribution.

Corresponding author: O. Hen.

#### 53. “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. Piassetzky, A. Schmidt, M. Strikman, L.B. Weinstein, and *O. Hen*.

**arXiv: 2104.07130**

Corresponding author: O. Hen.

#### 52. “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:**

**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 e4ν Collaborations).

**Nature, In-Print (2021).**

\*Equal Contribution by MIT and ODU students.

**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<sup>3</sup>He 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. “<sup>12</sup>C(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. Piassetzky, 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. Piassetzky, 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. Piassetzky, 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  $\nu_{\mu}$ -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  $^3\text{H}$  and  $^3\text{He}$  (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  $^4\text{He}(e,e’p\text{N})$  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  $J/\psi$  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. **“Laser Calibration System for Time of Flight Scintillator Arrays”**  
 A.W. Denniston, S. May-Tal Beck, and P. Toledo et al.  
**Nucl. Instrum. Meth. A 973, 164177 (2020).**
32. **“The CLAS12 Backward Angle Neutron Detector (BAND)”**  
 E.P. Segarra, F. Hauenstein, and A. Schmidt et al.  
**Nucl. Instrum. Meth. A 978, 164356 (2020).**
31. **“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.
30. **“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).
29. **“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.
28. **“Nucleon-nucleon correlations and the single-particle strength in atomic nuclei”**  
 S. Paschalis, M. Petri, A.O. Macchiavelli, *O. Hen*, and E. Piasezky.  
**Phys. Lett. B 800, 135110 (2019).**
27. **“Comparing proton momentum distributions in  $A = 2$  and  $3$  nuclei via  $^2\text{H}$   $^3\text{H}$  and  $^3\text{He}$  ( $e, e'p$ ) 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. Piasezky 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. Piasezky *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. 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).**  
Corresponding author: O. Hen.
18. **“The symmetry energy  $\gamma$  parameter of the consistent relativistic mean-field models”**  
M. Dutra, O. Lourenco, *O. Hen*, E. Piasetzky 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. Piasetzky, 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. Piasetzky.  
**Phys. Rev. C 94, 045501 (2016).**
14. **“Correlated Fermions in Nuclei and Ultracold Atomic Gases”**  
*O. Hen*, L. B. Weinstein, E. Piasetzky, 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. Piassetzky, 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. Piassetzky.  
**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. Piassetzky, 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. Piassetzky, and L. B. Weinstein.  
**Phys. Rev. C 85, 047301 (2012).**
4. **“Investigations of HAVAR<sup>®</sup> 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. Piasetzky, D. W. Higinbotham, J. Gomez, *O. Hen*, and R. Shneor.  
**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. Shneor.  
**Nucl. Phys. A** **855**, 245-248 (2011).

## Conferences, Seminars and Colloquia – Or Hen

133 oral presentations given in the form of invited & plenary talks (83) and seminars & colloquia (50).

### Confirmed:

89. **“From quarks to nuclei: unveiling universalities in strongly interacting systems”**  
Rice University, Physics Department Colloquium, Houston, Texas (November 2021).
88. **“Neutrino Oscillations and Interactions”**  
University of Ljubljana, Physics Department Colloquium, Ljubljana, Slovenia [via zoom]  
(November 2021).
87. **“Nucleon structure modification from tagged DIS measurements”**  
Light Cone 2021: Physics of Hadrons on the Light Front, Jeju island, Korea (November 2021).
86. **“QCD and the nuclear medium”**  
Lake Louise Winter Institute, Lake Louise, Canada (February 2022).
85. **“Hadronic Physics, Quantum Chromodynamics, and the nuclear medium”**  
UK STFC summer school, Durham, UK (March 2022).

### Invited & Plenary:

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”**  
 3<sup>rd</sup> 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”**  
 1<sup>st</sup> 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)**  
 21<sup>st</sup> International workshop on Neutrinos from Accelerators (NUFACT '19), Daegu, Korea (August 2019).
71. **“Modified Structure of Protons and Neutrons in Correlated Pairs”**  
 5<sup>th</sup> 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)**  
 27<sup>th</sup> 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”**  
2<sup>nd</sup> Workshop on Quantitative Challenges in EMC and SRC Research, 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”**  
5<sup>th</sup> 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)**  
22<sup>nd</sup> 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”**  
13<sup>th</sup> Conference on Interactions of Particle and Nuclear Physics (CIPANP18), Palm Springs, CA (June, 2018)
56. **“From Nuclei to Neutron-Stars: Short-Range Fermion Correlations”**  
3<sup>rd</sup> 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)**  
26<sup>th</sup> 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”**  
3<sup>rd</sup> 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”**  
3<sup>rd</sup> 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)**  
11<sup>th</sup> 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 (R<sup>3</sup>B), GSI Darmstadt, Germany (April 2017).
43. **“New Insights to the Origin of the EMC effect”**  
25<sup>th</sup> 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”**  
7<sup>th</sup> 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)**  
23<sup>rd</sup> 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”**  
6<sup>th</sup> international symposium on nuclear symmetry energy (NUSYM16), Beijing, China (June 2016).
30. **“The OLIVIA experiment - ‘Trapless’ study of <sup>8</sup>Li 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”**  
54<sup>th</sup> 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)**  
11<sup>th</sup> 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”**  
5<sup>th</sup> 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”**  
12<sup>th</sup> Conference on Interactions of Particle and Nuclear Physics (CIPANP15), Vail, Colorado (May 2015)
14. **“Short-Range Correlations in Imbalanced Fermi Systems” (Plenary)**  
7<sup>th</sup> international Conference on Quarks and Nuclear Physics (QNP15), Valparaiso, Chile (March 2015)

13. **“Energy Sharing in Imbalanced Fermi Systems”**  
4<sup>th</sup> 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”**  
44<sup>th</sup> 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:**

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)**  
19<sup>th</sup> 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, 32<sup>nd</sup> 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  $^8\text{Li}$  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”**  
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