## Curriculum Vitae

# Vadim A. Guzey

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Education	
• <b>Pennsylvania State University,</b> State College, USA Ph.D. in Physics, 1999	1994-1999
• St. Petersburg State University, St. Petersburg, Russia Bachelor of Science in Physics, 1993	1988-1993
Professional Experience	
Petersburg Nuclear Physics Institute, Gatchina, Russia     Senior Scientist	2013-present
• University of Jyväskylä, Finland University Researcher	Sep. 2017-June 2019
Hampton University, Hampton, VA, USA     Postdoctoral Researcher	2012
• Thomas Jefferson National Accelerator Facility (Jefferson Newport News, VA, USA Theory Postdoctoral Fellow	on Lab), 2007-2012
Ruhr-Universität Bochum (RUB), Germany     Postdoctoral Researcher	2002-2007
• The Special Centre for the Subatomic Structure of Mattee University of Adelaide, Australia Postdoctoral Fellow	er (CSSM), 2000-2002
• <b>Pennsylvania State University,</b> State College, PA, USA Teaching and Research Assistant	1994-1999

## **Grants and Awards**

<ul> <li>2<sup>nd</sup> Prize, Competition "Best Scientific Works of PNPI 2019"</li> <li>"Photoproduction of light vector mesons ultraperipheral collisions of nuclei at the L</li> </ul>	<b>2019</b> .HC"
• Joint RFBR (Russia) - DFG (Germany) grant "New constraints on nuclear parton distribution functions at small x from dijet production in γA collisions at the LHC"	2017-2019
• DAAD (German Academic Exchange Service) Scholarship for Research Stays for University Academics and Scientists	2015
• 1 <sup>st</sup> Prize, Competition "Best Scientific Works of PNPI 2015" "Studies of the gluon distribution in the nucleon and nuclei in $J/\psi$ photoproduction at the LHC"	2015
Duncan Gate Fellowship, Penn State University	1998
Braddock Graduate Fellowship, Penn State University	1996

# Teaching

• Lectures " <i>Hadron-nucleus interactions at very high energies: black disk limit</i> " and " <i>Interaction of high-energy hadrons with nuclei and nuclear shadowing</i> ", 2017 International Summer Workshop on Reaction Theory, June 12-22, 2017, Bloomington, Indiana, USA	June 2017
• Lectures "Nuclear effects in high energy lepton-nucleus scattering", HUGS 2011: 26th Annual Hampton University Graduate Studies Program, Jefferson Lab, USA	Summer 2011
<ul> <li>Manager/Coordinator, HUGS 2010: 25<sup>th</sup> Annual Hampton University Graduate Studies Program, Jefferson Lab, USA</li> </ul>	Summer 2010
<ul> <li>Manager/Coordinator, lectures "Nuclear effects in high energy lepton-nucleus scattering", HUGS 2009: 24<sup>th</sup> Annual Hampton University Graduate Studies Program, Jefferson Lab, USA</li> </ul>	Summer 2009
<ul> <li>Instructor for undergraduate recitations, Quantum Mechanics, Ruhr-Universität Bochum, Germany</li> </ul>	2003
<ul> <li>Instructor for undergraduate physics laboratories and recitations, Penn State University, USA</li> </ul>	1994-1998

V. Guzev

•	T. Teckentrup, A new parameterization of generalized parton distributions	2006
	and description of DVCS data, Diploma (Undergraduate thesis),	
	Ruhr-Universität Bochum, Germany	

T. Nieberg, *Unitarity limit in high energy scattering*, 2003
 Diploma (Undergraduate thesis), Ruhr-Universität Bochum, Germany

## Research

## **Primary Research Interests**

- QCD theory and phenomenology of high-energy nuclear physics:
  - coherent nuclear effects in hard lepton–nucleus, hadron–nucleus and photon–nucleus scattering, quark and gluon distributions in nuclei at small *x* and nuclear shadowing
  - exclusive photoproduction of light and heavy vector mesons including quarkonia in ultraperipheral collisions (UPCs) at the LHC and RHIC
  - inclusive and diffractive photoproduction of jets in UPCs at the LHC and lepton-proton and lepton nucleus scattering at the future EIC, LHeC, and FCC
  - generalized parton distributions (GPDs) of nuclei and the nucleon: phenomenological models, medium modifications, small-*x* coherent nuclear effects
  - high-energy QCD: the dipole model, saturation.
- Nuclear effects in soft hadron–nucleus scattering at high energies, applications to RHIC and LHC physics.
- Theoretical support of physics programs of Jefferson Lab, RHIC, the LHC, and the future Electron-Ion Collider (EIC) and LHeC (CERN) projects.

## **Collaborations and Projects**

PNPI Representative in EIC User Group	since 2016
<ul> <li>Jefferson Laboratory Directed Research &amp; Development (LDRD) grant "Physics potential of polarized light ions with EIC@JLab"</li> </ul>	2013-2015
• Member of working group "Medium-energy EIC at Jefferson Lab"	2009-2012
Member of the LHeC Study Group	2011-present

Curriculum Vitae	V. Guzey
• Scientific coordinator of topic "Imaging QCD Matter" of INT Program "Gluons and quark sea at high energy: distributions, polarization, tomography", Institute for Nuclear Theory, Seattle	SeptNov. 2010
Convener of eA Working Group of the Electron-Ion Collider (EIC) Collaboration	2007-2012
Most Cited Papers (50+ citations, July 2020)	# of citations
1. A. Abada et al., FCC-hh: The Hadron Collider : Future Circular Collider Conceptual Design Report Volume 3, Eur. Phys. J. ST 228 (2019) 4, 755-110	<b>162</b>
2. A. Abada et al., FCC-ee: The Lepton Collider : Future Circular Collider Conceptual Design Report Volume 2, Eur. Phys. J. ST 228 (2019) 2, 261-623	171
3. A. Abada et al., HE-LHC: The High-Energy Large Hadron Collider: Future Circular Collider Conceptual Design Report Volume 4, Eur. Phys. J. ST 228 (2019) 5, 1109-1382	82
4. Z. Citron <i>et al.</i> , <i>Report from Working Group 5: Future physics opportunities j</i> <i>high-density QCD at the LHC with heavy ion and proton beams</i> , CERN Yello Monogr. 7 (2019) 1159-1410	<i>for</i> <b>102</b> w Rep.
5. A. Abada et al., FCC Opportunities: Future Circular Collider Conceptual Design Report Volume 1, Eur. Phys. J. C 79 (2019) 6, 474	155
<ul> <li>6. V. Guzey, M. Zhalov, Exclusive J/ψ production in ultraperipheral collisions at the LHC: constrains on the gluon distributions in the proton and nuclei, JH (2013) 207</li> </ul>	<b>66</b> HEP 1310
<ol> <li>V. Guzey, E. Kryshen, M. Strikman, M. Zhalov, Evidence for nuclear gluon shadowing from the ALICE measurement of PbPb ultraperipheral exclusive J/ψ production, Phys. Lett. B726 (2013) 290</li> </ol>	70
8. A. Accardi et al., Electron-Ion Collider: The next QCD frontier - Understanding the gluon that binds us all, Eur. Phys. J A52 (2016) no.9, 268 arXiv:1212.1701 [nucl-ex] (2012), BNL-98815-2012-JA, JLAB-PHY-12-165	<b>796</b>
9. S. Abeyratne et al., Science Requirements and Conceptual Design for a Polar Medium Energy Electron-Ion Collider at Jefferson Lab, arXiv:1209.0757, JL ACC-12-1619	rized <b>85</b> AB-

<ul> <li>10. J.L. Abelleira Fernandez <i>et al.</i>, [LHeC Study Group], <i>A Large Hadron Electron Collider at CERN: Report on the Physics and</i> <i>Design Concepts for Machine and Detector</i>, J. Phys. G39 (2012) 075001</li> <li>11. D. Boer <i>et al.</i>, <i>Gluons and the quark sea at high energies: distributions</i>, <i>nelawingtion, temperature, arXiv:</i>1108 1712 [avail th] (2011). SLAC P. 005</li> </ul>	554 513
INT-PUB-11-034, BNL-96164-2011, JLAB-THY-11-1373	
12. L. Frankfurt, V. Guzey, M. Strikman, <i>Leading twist nuclear shadowing phenomena in hard processes with nuclei</i> , Phys. Rept. 512 (2012) 255	143
13. C.A. Salgado et al., Proton-nucleus collisions at the LHC: Scientific opportunities and requirements, J. Phys. G 39 (2012) 015010	179
14. A.J. Baltz et al., The Physics of Ultraperipheral Collisions at the LHC, Phys. Rept. 458 (2008)	442
15. V. Guzey, T. Teckentrup, <i>The dual parametrization of the proton generalized parton distribution functions H and E and description of the DVCS cross sections and asymmetries</i> , Phys. Rev. D74 (2006) 054027	63
16. V. Guzey, M. Strikman, Proton-nucleus scattering and cross section fluctuations at RHIC and LHC, Phys.Lett. B633 (2006) 245, Phys.Lett. B663 (2008) 456	57
17.V. Guzey, M. Strikman, W. Vogelsang, Observations on dA scattering at forward rapidities, Phys. Lett. B603 (2004) 173	93
18. A. Accardi et al., Hard probes in heavy ion collisions at the LHC: pdfs, shadowing and pA collisions, hep-ph/0308248, CERN-2004-009-A, HIP-2003-40-TH	107
19. L. Frankfurt, V, Guzey, M. Strikman, Leading twist nuclear shadowing: uncertainties, comparison to experiments, and higher twist effects, Phys. Rev. D71 (2005) 054001	109
20. V. Guzey, M. Strikman, <i>DVCS on spinless nuclear targets in impulse approximation</i> , Phys. Rev. D71 (2005) 054001	62
21. L. Frankfurt, V. Guzey, M. McDermott, M. Strikman, Nuclear shadowing in deep inelastic scattering on nuclei: leading twist versus eikonal approaches, JHEP 0202 (2002) 027	60
22. F. Bissey, V. Guzey, M. Strikman, A.W. Thomas, <i>Complete analysis of spin structure g1 of He-3</i> , Phys. Rev. C65 (2002) 064317	59

<ul> <li>23. L. Frankfurt, V. Guzey, M. McDermott, M. Strikman, Revealing the black body regime of small x DIS through final state signals, Phys. Rev. Lett. 87 (2001) 192301</li> </ul>	66
24. M. McDermott, L. Frankfurt, V. Guzey, M. Strikman, Unitarity and the QCD improved dipole picture, Eur. Phys. J. C16 (2000) 641	99
<ul> <li>25. L. Frankfurt, A. Freund, V. Guzey, M. Strikman, Nondiagonal parton distributions in the leading logarithmic approximation, Phys. Lett. B418 (1998) 345; Erratum-ibid. B429 (1998) 414</li> </ul>	113

## Main Scientific Results and Key Publications

- NLO pQCD predictions for cross sections of diffractive dijet photoproduction in ultraperipheral collisions (UPCs) at the LHC [1] and lepton-proton and lepton-nucleus collisions the future Electron-Ion Collider [2].
- Calculation of the cross section of inclusive dijet photoproduction in Pb-Pb UPCs at the LHC using NLO pQCD, which provided a good description of various kinematic distributions measured by the ATLAS Collaboration [3].
- Analysis of charmonium photoproduction in ultraperipheral collisions (UPCs) at the LHC in the framework of the leading-order perturbative QCD and leading twist nuclear shadowing:
  - Extraction [4] of the nuclear suppression factor from the ALICE measurement of exclusive J/ $\psi$  photoproduction in Pb-Pb UPCs at  $\sqrt{s_{NN}}=2.76$  TeV, which provided the first direct evidence for strong nuclear gluon shadowing in heavy nuclei at x = 0.001. The magnitude of the suppression R<sub>g</sub>(x=0.001)=0.6 agrees with our earlier predictions in the model of leading twist nuclear shadowing [5].
  - The CMS measurement of coherent J/ $\psi$  photoproduction accompanied by forward neutron emission in Pb-Pb UPCs at  $\sqrt{s_{NN}}=2.76$  TeV confirmed our predictions [2].
  - Simultaneous QCD description of the LHCb and ALICE data on exclusive photoproduction of  $J/\psi$  in pp and Pb-Pb UPCs enabling one to constrain the small-*x* behavior of the gluon distributions in the nucleon and nuclei [6].
  - Predictions for coherent and incoherent J/ $\psi$  photoproduction in Pb-Pb UPCs accompanied by electromagnetic excitation of colliding nuclei with subsequent neutron emission giving a new method to probe the nuclear gluon density down to  $x = 10^{-4}$  and below [7].
- Calculation of the cross sections of coherent and incoherent  $\rho$  photoproduction on nuclei in Pb-Pb UPCs at the LHC using the Gribov-Glauber model for photon-nucleus scattering and a generalization of the VMD model for the hadronic structure of the photon. Our approach

successfully described the availabe RHIC and LHC data on this process and made predictions for Run 2 at the LHC [8].

- Development of the leading twist nuclear shadowing model for nuclear parton distribution functions (PDFs) at small *x* [2].
- Phenomenological applications of the leading twist nuclear shadowing model to small-*x* physics programs of the Relativistic Heavy Ion Collider (RHIC), the Large Hadron Collider (LHC), future Electron-Ion Collider (EIC), and LHeC Large Hadron-Electron Collider (LHeC):
  - Predictions for next-to-leading order (NLO) nuclear quark and gluon PDFs and structure functions for a wide range of nuclei for  $10^{-5} \le x \le 0.9$  and  $4 \text{ GeV}^2 \le Q^2 \le 10,000 \text{ GeV}^2$ .
  - The observation that at RHIC, the suppression of hadron production in forward deuteronnucleus scattering compared to the proton-proton scattering is stronger than usually assumed and cannot be explained by the standard leading twist nuclear shadowing [9].
  - Predictions for nuclear diffractive PDFs and structure functions (both coherent and incoherent) for various nuclei for  $10^{-5} \le x \le 0.9$  and  $4 \text{ GeV}^2 \le Q^2 \le 10,000 \text{ GeV}^2$  [2,10].
  - Predictions for the inclusive and tagged deuteron structure functions (polarized and unpolarized) and an analysis of the role of nuclear shadowing and anti-shadowing in the extraction of the neutron structure function [11,12].
  - First theoretical analysis of the role of nuclear shadowing and antishadowing in deep inelastic scattering on polarized nuclei: <sup>3</sup>He and <sup>3</sup>H, <sup>7</sup>Li and <sup>7</sup>Be, and <sup>6</sup>LiD [13,14].
  - Predictions for the spin-dependent structure function of <sup>3</sup>He including the effects of nuclear shadowing and antishadowing, non-nucleonic ( $\Delta$  resonance) degrees of freedom and Fermi motion of nucleons [15]; extraction of the neutron spin structure function g<sub>1</sub> using the Bjorken sum rule [16].
- Theoretical analysis of DVCS on nuclear targets, in particular, of the role of coherent (nucleus is intact) and incoherent (nucleus breaks-up or becomes excited) contributions to nuclear DVCS; analysis of non-nucleonic (mesonic) degrees of freedom in nuclear DVCS [17,18,19].
- Analysis of incoherent DVCS on <sup>4</sup>He in the <sup>4</sup>He(e,e'γ p)X reaction, which probes possible medium-modifications of the bound nucleon GPDs and the observation that nuclear medium modifies the beam-spin DVCS asymmetry A<sub>LU</sub> by as much as 6% [20]. Our predictions have been used to stimulate the measurements of coherent and incoherent DVCS on <sup>4</sup>He at JLab.
- Analysis of the ultra high-energy regime of the strong interactions the so-called black disk limit (BDL) and formulation of specific model-independent signals of its onset [21].
- Development of a new dipole model for lepton-nucleon and lepton-nucleus DIS and quantitative studies of parton saturation (non-linear dynamics) [22].

- [1] V. Guzey, M. Klasen, JHEP 04 (2016) 158
- [2] V. Guzey, M. Klasen, JHEP 05 (2020) 074
- [3] V. Guzey, M. Klasen, Phys. Rev. C 99 (2019) 6, 065202
- [4] V. Guzey, E. Kryshen, M. Strikman, M. Zhalov, Phys. Lett. B 726 (2013) 290
- [5] L. Frankfurt, V. Guzey, M. Strikman, Physics Reports 512 (2012) 255
- [6] V. Guzey and M. Zhalov, JHEP10 (2013) 207
- [7] V. Guzey, M. Strikman, M. Zhalov, Eur. Phys. J. C (2014) 74:2942
- [8] L. Frankfurt, V. Guzey, M. Strikman, M. Zhalov, Phys. Lett. B 752 (2016) 51.
- [9] V. Guzey, M. Strikman, W. Vogelsang, Phys. Lett. B 603 (2004) 173
- [10] L. Frankfurt, V. Guzey and M. Strikman, Phys. Lett. B 586 (2004) 41
- [11] L. Frankfurt, V. Guzey, M. Strikman, Mod. Phys. Lett. A 21 (2006) 23
- [12] L. Frankfurt, V. Guzey and M. Strikman, Phys. Rev. Lett. 91 (2003) 202001
- [13] V. Guzey, M. Strikman, Phys. Rev. C 61 (2000) 014002
- [14] V. Guzey, Phys. Rev. C 64 (2001) 045201
- [15] F. Bissey, V. Guzey, M. Strikman, A.W. Thomas, Phys. Rev. C 65 (2002) 064317
- [16] C. Boros, V. Guzey, M. Strikman, A.W. Thomas, Phys. Rev. D 64 (2001) 014025
- [17] V. Guzey and M. Strikman, Phys. Rev. C 68 (2003) 015204
- [18] V. Guzey, M. Siddikov, J. Phys. G: Nucl. Part. Phys. 32 (2006) 251
- [19] V. Guzey, Phys. Rev. C 77 (2008) 025211
- [20] V. Guzey, A.W. Thomas, K. Tsushima, Phys. Lett. B 673 (2009) 9
- [21] L. Frankfurt, V. Guzey, M. McDermott, M. Strikman, Phys. Rev. Lett. 87 (2001) 192301
- [22] M. McDermott, L. Frankfurt, V. Guzey, M. Strikman, Eur. Phys. J. C16 (2000) 641

#### **Publications**

#### **Review Articles**

- 1. A. Accardi, V. Guzey, A. Prokudin, C. Weiss, *Nuclear physics with a medium-energy Electron-Ion Collider*, Eur. Phys. J. A (2012) 48:92
- 2. L. Frankfurt, V. Guzey, M. Strikman, *Leading twist nuclear shadowing phenomena in hard processes with nuclei*, Physics Reports 512 (2012) 255
- 3. A.J. Baltz *et al.*, *The Physics of Ultraperipheral Collisions at the LHC*, Physics Reports 458 (2008) 1
- 4. L. Frankfurt, V. Guzey, M. Strikman, Nuclear shadowing in inclusive and tagged structure

functions and extraction of  $F_{2p}$ - $F_{2n}$  at small x from electron-deuteron collider data, Mod. Phys. Lett. A 21 (2006) 23

5. L. Frankfurt, V. Guzey, M. Strikman, *Color coherent phenomena on nuclei and the QCD evolution equation*, J. Phys. G 27 (2001) R23

#### **Publications in Refereed Journals**

- 1. V. Guzey, M. Klasen, Diffractive dijet photoproduction at the EIC, JHEP 05 (2020) 074
- 2. V. Guzey, M. Klasen, Inclusive dijet photoproduction in ultraperipheral heavy-ion collisions at the CERN LHC in next-to-leading order QCD, Phys. Rev. C 99 (2019) 065202
- 3. V. Guzey, M. Klasen, *Constraints on nuclear parton distributions from dijet photoproduction at the LHC*, Eur. Phys. J. C (2019) 79:396
- V. Guzey, M. Strikman, M. Zhalov, Nucleon dissociation and incoherent J/ψ photoproduction on nuclei in ion ultraperipheral collisions at the CERN Large Hadron Collider, Phys. Rev. C 99 (2019) 015201
- 5. V. Guzey, E. Kryshen, M. Zhalov, *Photoproduction of light vector mesons in Xe-Xe ultraperipheral collisions at the LHC and the nuclear density of Xe-129*, Phys. Lett. B 782 (2018) 251
- M. Goharipour, H. Khanpour, V. Guzey, *First global next-to-leading order determination of diffractive parton distributions and their uncertainties within the xFitter framework*, Eur. Phys. J C78 (2018) 309
- 7. H. Khanpour, M. Goharipour, V. Guzey, *Effects of next-to-leading order DGLAP evolution on generalized parton distributions of the proton and deeply virtual Compton scattering at high energy*, Eur. Phys. J. C78 (2018) no.1, 7
- 8. L. Frankfurt, V. Guzey, M. Strikman, *Dynamical model of antishadowing of the nuclear gluon distribution*, Phys. Rev. C 95 (2017) 055208
- 9. M. Alvioli, L. Frankfurt, V. Guzey, M. Strikman, M. Zhalov, *Mapping color fluctuations in the photon in ultraperipheral heavy ion collisions at the Large Hadron Collider*, Phys. Lett. B 767 (2017) 450
- 10.V. Guzey, M. Strikman, M. Zhalov, Accessing transverse nucleon and gluon distributions in heavy nuclei using coherent vector meson photoproduction at high energies in ion ultraperipheral collisions, Phys. Rev. C 95 (2017) 025204
- 11. V. Guzey, M. Klasen, *A fresh look at factorization breaking in diffractive photoproduction of dijets at HERA at next-to-leading order QCD*, Eur. Phys. J C76 (2016) no.8, 467
- V. Guzey, E. Kryshen, M. Zhalov, Coherent photoproduction of vector mesons in ultraperipheral heavy ion collisions: Update for run 2 at the CERN Large Hadron Collider, Phys. Rev. C 93 (2016) 055206
- 13. V. Guzey, M. Klasen, *Diffractive dijet photoproduction in ultraperipheral collisions at the LHC in next-to-leading order QCD*, JHEP 1604 (2016) 158

- L. Frankfurt, V. Guzey, M. Strikman, M. Zhalov, Nuclear shadowing in photoproduction of ρ mesons in ultraperipheral nucleus collisions at RHIC and the LHC, Phys. Lett. B 752 (2016) 51
- 15. M. Alvioli, L. Frankfurt, V. Guzey, M. Strikman, *Revealing nucleon and nucleus flickering in pA collisions at the LHC*, Phys. Rev. C 90 (2014) 034914
- 16. V. Guzey, M. Strikman, M. Zhalov, Disentangling coherent and incoherent J/ψ photoproduction on nuclei by neutron tagging in ultraperipheral ion collisions at the LHC, Eur. Phys. J. C (2014) 74:2942
- 17. V. Guzey and M. Zhalov, *Rapidity and momentum transfer distributions of coherent*  $J/\psi$  *photoproduction in ultraperipheral pPb collisions at the LHC*, JHEP 02 (2014) 046
- 18. V. Guzey and M. Zhalov, *Exclusive J/\psi production in ultraperipheral collisions at the LHC: constrains on the gluon distributions in the proton and nuclei, JHEP10 (2013) 207*
- V. Guzey, E. Kryshen, M. Strikman, M. Zhalov, Evidence for nuclear gluon shadowing from the ALICE measurements of PbPb ultraperipheral exclusive J/ψ production, Phys. Lett. B 726 (2013) 290
- V. Guzey, M. Guzzi, P.M. Nadolsky, M. Strikman, B. Wang, *Massive neutral gauge boson production as a probe of nuclear modifications of parton distributions at the LHC*, Eur. Phys. J. A49 (2013) 35
- V. Guzey, L. Zhu, C.E. Keppel, M.E. Christy, D. Gaskell, P. Solvignon, *Impact of nuclear dependence of* R=σ<sub>L</sub>/σ<sub>T</sub> *on antishadowing in nuclear structure functions*, Phys. Rev. C 86 (2012) 045201
- J.L. Abelleira Fernandez et al., (LHeC Study Group), A Large Hadron Electron Collider at CERN: Report on the physics and design concepts for machine and detector, J.Phys. G39 (2012) 075001
- 23. C.A. Salgado et al., Proton-nucleus collisions at the LHC: Scientific opportunities and requirements, J. Phys. G: Nucl. Part. Phys. 39 (2012) 015010
- 24. A. Airapetian et al., (HERMES collaboration), Nuclear-mass dependence of azimuthal *beam-helicity and beam-charge asymmetries in deeply virtual Compton scattering*, Phys. Rev. C 81 (2010) 035202
- 25. V. Guzey, M. Strikman, Color fluctuation approximation for multiple interactions in leading twist theory of nuclear shadowing, Phys. Lett. B 687 (2010) 167
- 26. V. Guzey, A.W. Thomas, K. Tsushima, *Medium modifications of the bound nucleon GPDs and the quark contribution to the spin sum rule*, Phys. Rev. C 79 (2009) 055205

- K. Goeke, V. Guzey, M. Siddikov, Leading twist nuclear shadowing, nuclear parton distributions, and nuclear deeply virtual Compton scattering at small x, Phys. Rev. C 79 (2009) 035210
- 28. V. Guzey, A.W. Thomas, K. Tsushima, *Medium modifications of the bound nucleon GPDs and incoherent DVCS on nuclear targets*, Phys. Lett. B 673 (2009) 9
- 29. V. Guzey, T. Teckentrup, *On the mistake in the implementation of the minimal model of the dual parameterization and resulting inability to describe the high-energy DVCS data*, Phys. Rev. D 79 (2009) 017501
- 30. K. Goeke, V. Guzey, M. Siddikov, *Generalized parton distributions and Deeply Virtual Compton Scattering in Color Glass Condensate model*, Eur Phys. J. C 56 (2008) 203
- 31. V. Guzey, *Neutron contribution to nuclear DVCS asymmetries*, Phys. Rev. C 77 (2008) 025211
- 32. V. Guzey, M. Strikman, *Electromagnetic and strong contributions to dAu soft coherent inelastic diffraction at RHIC*, Phys. Rev. C 77 (2008) 067901
- 33. K. Goeke, V. Guzey, M. Siddikov, *Deeply Virtual Compton Scattering on nucleons and nuclei in the generalized vector meson dominance model*, Eur. Phys. J. A 36 (2008) 49
- 34. V. Guzey, M. Strikman, *Leading twist nuclear shadowing and suppression of hard coherent diffraction in proton-nucleus scattering*, Phys. Rev. C 75 (2007) 045208
- 35. V. Guzey, T. Teckentrup, *The dual parameterization of the proton generalized parton distribution functions H and E and description of the DVCS cross sections and asymmetries*, Phys. Rev. D 74 (2006) 054027
- 36. V. Guzey, M. Siddikov, *On the A-dependence of nuclear generalized parton distributions*, J. Phys. G: Nucl. Part. Phys. 32 (2006) 251
- 37. V. Guzey, M.V. Polyakov, *Dual parameterization of generalized parton distributions and description of the DVCS data*, Eur. Phys. J. C 46 (2006) 151
- 38. V. Guzey, M. Strikman, *Proton-nucleus scattering and cross section fluctuations at RHIC and LHC*, Phys. Lett. B 633 (2006) 245; Phys. Lett. B 663 (2008) 456 [Erratum]
- 39. V. Guzey, M. Strikman, W. Vogelsang, *Observations on dA scattering at forward rapidities*, Phys. Lett. B 603 (2004) 173
- 40. V. Guzey, Production of  $\Theta^+$  in  $\gamma + D \rightarrow \Lambda + \Theta^+$  and  $\gamma + D \rightarrow \Sigma + \Theta^+$  reactions, Phys. Rev. C 69 (2004) 065203

- T. Rogers, V. Guzey, M. Strikman, X. Zu, Determining the proximity of γ\*N scattering to the black body limit using deep inelastic scattering and J/Ψ production, Phys. Rev. D 69 (2004) 074011
- 42. L. Frankfurt, V. Guzey and M. Strikman, *Leading twist coherent diffraction on nuclei in deep inelastic scattering at small x and nuclear shadowing*, Phys. Lett. B 586 (2004) 41
- 43. V. Guzey and M.V. Polyakov, *SU(3) systematization of baryons: theoretical methods and mixing with the antidecuplet*, Annalen Phys. 13 (2004) 673
- 44. V. Guzey and M. Strikman, *DVCS on spinless nuclear targets in impulse approximation*, Phys. Rev. C 68 (2003) 015204
- 45. L. Frankfurt, V. Guzey and M. Strikman, *Nuclear shadowing and extraction of*  $F_{2p}$ - $F_{2n}$  and *small x from deuteron collider data*, Phys. Rev. Lett. 91 (2003) 202001
- 46. L. Frankfurt, V. Guzey, M. Strikman, and M. Zhalov, *Onset of perturbative color opacity* at *small x and Y Coherent Photoproduction off heavy nuclei at LHC*, JHEP 0308 (2003) 043
- 47. L. Frankfurt, V. Guzey and M. Strikman, *Leading twist model of nuclear shadowing: results, uncertainties and comparison to the experiment*, Phys. Rev. D 71 (2005) 054001
- 48. L. Frankfurt, V. Guzey, M. McDermott, M. Strikman, *Nuclear shadowing in deep inelastic scattering on nuclei: leading twist versus eikonal approaches*, JHEP 0202 (2002) 027
- 49. F. Bissey, V. Guzey, M. Strikman, A.W. Thomas, *Complete analysis of spin structure function g1 of He-3*, Phys. Rev. C 65 (2002) 064317
- 50. V. Guzey, K. Saito, M. Strikman, A.W. Thomas, K. Tsushima, *Non-singlet structure functions* of the <sup>3</sup>He <sup>3</sup>H system and divergence of the Gottfried integral, Phys. Rev. D 64 (2001) 054503
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- 17. *A. Baltz et al., Photoproduction at collider energies: From RHIC and HERA to the LHC,* hep-ph/0702212, February 2007

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- 21. H. Abramowicz *et al.*, THERA: Electron-proton scattering at √s=1 TeV, Eds. U. Katz, M. Klein, A. Levy, in TESLA TDR DESY 2001-011, Vol. 4, p. 4-99, Hamburg 2001, ed. R. Klanner.

## **Conference and Workshop Talks**

- 1. *Diffractive dijet photoproduction at EIC*, 2nd EIC Yellow Report Workshop at Pavia University, 21 May 2020 (remote talk)
- 2. *Leading-twist shadowing in inclusive and diffractive DIS*, Workshop "Exploring QCD with light nuclei at EIC", Stony Brook University, Jan. 21-24, 2020 (remote talk)
- 3. *3He spin structure function and intrinsic isobars*, Workshop "Exploring QCD with light nuclei at EIC", Stony Brook University, Jan. 21-24, 2020 (remote talk)
- 4. *eA Theory with heavy ions: nuclear shadowing in eA and γA scattering*, The Third Workshop on "MCEGs for future ep and eA facilities", Erwin-Schrödinger-Institute, Vienna, Austria, Nov 20-22, 2019
- 5. *A U.S.-based Electron-Ion Collider*, Plenary talk, IV International Conference on Particle Physics and Astrophysics (ICPPA-2018), Oct 22-26, 2018, MEPhI, Moscow

- 6. *Nuclear shadowing in exclusive processes*, INT Program INT-18-3 "Probing Nucleons and Nuclei in High Energy Collisions", Oct 1 Nov 16, 2018 (remote talk)
- Dijet photoproduction in UPCs at the LHC and nuclear PDFs at small x, Conference "Hadron structure and QCD: from low to high energies (HSQCD-2018)", NRC KI - PNPI, Gatchina, Russia, Aug 6 - 10, 2018
- 8. *Vector meson production on nuclei and nuclear shadowing*, Workshop "Next-generation GPD studies with exclusive meson production at EIC", CFNS, Stony Brook University, June 4-6, 2018 (remote talk)
- 9. *Can we use UPC production to constrain gluon density in nuclear PDFs?* Workshop "Low-x gluon structure of nuclei and signals of saturation at LHC", CERN, Geneva, March 27, 2018 (remote talk)
- 10. *Nuclear shadowing in tagged DIS at small x*, Workshop "Polarized light ion physics with EIC", Ghent University, Belgium, Feb 5-9, 2018
- 11. *Nuclear shadowing and elastic charmonium photoproduction*, LHeC and FCC-eh Workshop, CERN, Geneva, Sep 11-13, 2017
- 12. Nuclear gluon distributions at small-x from charmonium and dijet photoproduction on nuclei at the LHC, RIKEN BNL Research Center Workshop "Synergies of pp and pA Collisions with an Electron-Ion Collider", Brookhaven National Laboratory, USA, June 26-28, 2017
- 13. Ultraperipheral collisions of ions at the LHC and nuclear shadowing in photoproduction of vector mesons on nuclei, International Session-Conference of the Section on Nuclear Physics, Physical Science Department, RAS, Nalchik, Russia, June 6-8, 2017
- Nuclear gluon distribution at small x from charmonium photoproduction in γA collisions at the LHC, International Session-Conference of the Section on Nuclear Physics, Physical Science Department, RAS, Nalchik, Russia, June 6-8, 2017
- 15. *Diffractive dijet photoproduction in UPCs at the LHC*, Workshop INT-17-65W "Probing QCD in Photon-Nucleus Interactions at RHIC and LHC: the Path to EIC", INT, Seattle, Feb 13-17, 2017
- 16. Theory overview of vector meson photoproduction on nuclei in UPCs at the LHC, Workshop INT-17-65W "Probing QCD in Photon-Nucleus Interactions at RHIC and LHC: the Path to EIC", INT, Seattle, Feb 13-17, 2017
- J/ψ photoproduction on nuclei, Workshop on LHCb Heavy Ion and Fixed Target Physics, CERN, Geneva, Switzerland, Jan 9-10, 2017
- 18. *Small-x collective effects in eA scattering*, 7th International Conference on Physics Opportunities at an EIC (POETIC 7), Temple University, Philadelphia, USA, Nov 14-18, 2016

- 19. *J/ψ photoproduction on nuclei*, Workshop "Nucleon and nuclear structure through di-lepton production, ECT\*, Trento, Italy, Oct 23-28, 2016
- 20. Leading twist nuclear shadowing: theory and applications to coherent charmonium photoproduction on nuclei in UPCs at the LHC, Workshop "Proton and photon-induced nuclear collisions at the LHC, CERN, Geneva, Switzerland, July 6-8, 2016
- 21. Nuclear shadowing in photoproduction of light and heavy vector mesons in ultraperipheral collisions of heavy ions at the LHC, Workshop "Hadron Structure and QCD: from Low to High Energies (HSQCD-2016)", Gatchina, Russia, June 27 July 1, 2016
- 22. Leading twist nuclear shadowing from photoproduction of charmonia in ultraperipheral collisions at the LHC, workshop "Next generation nuclear physics at JLab12 and EIC", Florida International University, Miami, USA, Feb 10-13, 2016 (remote presentation)
- 23. The gluon distribution at small x from photoproduction of  $\psi(2S)$  mesons in ultraperipheral collisions at the LHC, 65 International Conference "Nucleus-2015: New Horizons in Nuclear Physics, Nuclear Engineering, Femto- and Nanotechnologies", St. Petersburg, June 29-July 3, 2015.
- 24. *Nuclear shadowing in tagged DIS on deuteron*, Workshop "New Directions in Nuclear Deep Inelastic Scattering", ECT\*, Trento, Italy, June 8-12, 2015
- 25. *Theoretical overview of nuclear DVCS*, Workshop "New Directions in Nuclear Deep Inelastic Scattering", ECT\*, Trento, Italy, June 8-12, 2015
- 26. *Coherent phenomena in tagged DIS on deuteron*, Workshop "High Energy Nuclear Physics with Spectator Tagging", Old Dominion University, Norfolk, USA, March 9-11, 2015 (remote presentation over Blue Jeans)
- 27. *Small-x nuclear PDFs and exclusive J/ψ photoproduction*, Sapore Gravis workshop, Padua, Italy, Dec. 9-12, 2014.
- 28. Nuclear gluon distribution at small x from photoproduction of  $J/\psi$  in ion ultraperipheral collisions at the LHC, 64th International Conference "Nucleus-2014: Fundamental problems of nuclear physics, atomic power engineering and nuclear technologies", Minsk, Belarus, July 1-4, 2014.
- 29. Leading twist nuclear shadowing and J/ψ photoproduction in ultraperipheral collisions at *the LHC*, Workshop on photon-induced reactions at the LHC, CERN, Geneva, Switzerland, June 2-4, 2014
- 30. *DVCS with nuclear targets*, Workshop DVCS: From Observables to GPDs, Ruhr-University, Bochum, Germany, February 10-12, 2014
- 31. Color fields at medium energy: color transparency, nuclear shadowing and diffraction,

workshop QCD Frontier 2013, Jefferson Lab, USA, Oct. 21-22, 2013 (remote presentation)

- Exclusive processes with nuclei at an EIC, Workshop POETIC IV: Physics Opportunities at an Electron-Ion Collider, Jyväskylä, Finland, September 2-5, 2013
- Generalized parton distributions and exclusive processes, Invited plenary talk at 3<sup>rd</sup> workshop on the QCD structure of the nucleon (QCD-N'12), Bilbao, Spain, October 22-26, 2012
- 34. Summary of parallel session "Future of DIS", XIX International Workshop on Deep-Inelastic Scattering and Related Subjects, Newport News, VA, April 10-15, 2011
- 35. Spatial imaging of the nucleon and nuclei at an Electron-Ion Collider,
   3<sup>rd</sup> International EIC Advisory Committee meeting, Jefferson Lab, April 10, 2011
- 36. *3D imaging of sea quarks and gluons at an Electron-Ion Collider*, QCD evolution workshop: from collinear to non-collinear case, Jefferson Lab, April 8, 2011
- 37. *Physics opportunities with an Electron-Ion Collider*, 6<sup>th</sup> International workshop on high-p<sub>T</sub> physics at the LHC, Utrecht, The Netherlands, April 6, 2011
- 38. Summary of subtopic "Imaging QCD Matter": Generalized parton distributions, INT 10-3 Program "Gluons and the quark sea at high energies: distributions, polarization, tomography", INT, Seattle, WA, November 18, 2010
- 39. *Nuclear GPDs*, INT 10-3 Program "Gluons and the quark sea at high energies: distributions, polarization, tomography", INT, Seattle, WA, October 13, 2010
- 40. *Nuclear GPDs and coherent nuclear processes*, Exclusive Reactions at High Momentum Transfer, Jefferson Lab, May 18-21, 2010
- 41. Coherent phenomena in eA collisions, Spring workshop on Electron-Nucleus Collider Physics, The Rockefeller University, New York City, May 14, 2010
- 42. Exclusive Reactions Summary and Outlook, and
- 43. *Nuclear shadowing and nuclear parton distributions*, Workshop on Nuclear QCD studies at a future EIC, Argonne National Lab, April 7-9, 2010
- 44. Coherent and incoherent nuclear exclusive processes, Electron-Ion Collider Workshop: Electron-Nucleon Exclusive Reactions, Rutgers University, Piscataway, NJ, March 14-15, 2010

- 45. *Generalized parton distributions in nuclei and their medium modifications*, workshop "High Energy Nuclear Physics and QCD", Florida International University, Miami, FL, February 3-6, 2010
- 46. Coherent nuclear processes at high energies, EIC Collaboration Meeting, Stony Brook University, January 9-12, 2010
- 47. *Nuclear GPDs at an EIC*, INT workshop on Physics at a High Energy Electron Ion Collider, INT, Seattle, WA, October 19-23, 2009
- 48. *Generalized parton distributions in nuclei*, Science and Technology Review, Jefferson Lab, Newport News, VA, USA, July 15, 2009
- 49. *The Electron-Ion Collider*, 10<sup>th</sup> Conference of the Intersections of Particle and Nuclear Physics (CIPANP 2009), La Jolla, CA, USA, May 26-31, 2009
- 50. *Generalized parton distributions in nuclei*, 10<sup>th</sup> Conference of the Intersections of Particle and Nuclear Physics (CIPANP 2009), La Jolla, CA, USA, May 26-31, 2009
- 51. Nuclear medium modifications of bound nucleon generalized parton distributions, Third workshop of the APS Topical Group on Hadronic Physics (GHP 2009), Denver, CO, April 29-May 1, 2009
- 52. *Diffraction at Electron-Ion Collider*, Plenary talk at the EIC Collaboration meeting, LBNL, Berkeley, USA, December 11-13, 2008
- 53. *Deeply Virtual Compton Scattering with nuclei at small-x at EIC*, EIC Collaboration meeting, LBNL, Berkeley, USA, December 11-13, 2008
- 54. *Incoherent DVCS on nuclear targets*, Workshop Journees Noyaux du GDR Nucleon, LPSC, Grenoble, France, November 18-19, 2008
- 55. *Dual parameterization update*, GPD Working Group Mini-workshop "DVCS analysis", Jefferson Lab, Newport News, VA, USA, August 6-7, 2008
- 56. *Nuclear GPDs and DVCS in Collider kinematics*, IV Electron-Ion Collider workshop, Hampton University, Hampton, VA, USA, May 19-23, 2008
- 57. *Theory of DVCS on nuclei: Promising observables*, Short-Range Structure of Nuclei at 12 GeV Workshop, Jefferson Lab, Newport News, VA, USA, October 26-27, 2007
- 58. *Theory of DVCS on nuclei*, DVCS Hall A Collaboration Meeting, Jefferson Lab, Newport News, VA, USA, October 15, 2007
- 59. *Hard diffraction in DIS and pA*, Workshop on Photoproduction at collider energies: from RHIC and HERA to LHC, Trento, ECT\*, Italy, January 15-19, 2007

- 60. *Feasibility study for nuclear DVCS in collider kinematics*, Joint INT/BNL/JLab Workshop on Hard exclusive processes at JLab 12 GeV and a Future EIC, University of Maryland, College Park, MD, USA, October 29-30, 2006
- 61. *Dual parameterization of generalized parton distributions and description of DVCS data*, Joint INT/BNL/JLab Workshop on Hard exclusive processes at JLab 12 GeV and a Future EIC, University of Maryland, College Park, MD, USA, October 29-30, 2006
- 62. *Dual parameterization of generalized parton distributions and description of DVCS data*, Workshop on GPDs and exclusive processes, Trento, ECT\*, Italy, June 5-9, 2006
- 63. *Mixing and decays of the antidecuplet*, COSY-FFE Workshop, COSY, Jülich, Germany, October 4-5, 2005
- 64. *Status of nuclear PDFs and pA scattering at forward rapidity*, Workshop on Proton-Nucleus Collisions at the LHC, CERN, Geneva, May 25-27, 2005
- 65. *Mixing and decays of the antidecuplet in context of approximate SU(3) symmetry*, Workshop on Exotic Baryons, Trento, Italy, Feb. 21-24, 2005
- 66. Mixing and decays of the antidecuplet in context of approximate SU(3) symmetry, Joint Meeting Heidelberg-Liege-Paris-Rostock (HLPR 2004), Spa, Belgium, Dec. 16-18, 2004
- 67. *Status of nuclear parton distributions*, HERA and the LHC workshop, CERN, Geneva, March 26-27, 2004
- 68. *Status of nuclear parton distributions*, Second EIC Workshop, Jefferson Lab, Newport News, VA, USA, March 15-17, 2004
- 69. *Dual parametrization of GPDs and DVCS data*, German Physics Spring Meeting (DPG) 2004, Köln, March 10, 2004
- 70. Photoproduction of  $\Theta^+$  in  $\gamma + D \rightarrow \Lambda + \Theta^+$  and  $\gamma + D \rightarrow \Sigma + \Theta^+$  reactions, German Physics Spring Meeting (DPG) 2004, Köln, Germany, March 11, 2004
- 71. *Photoproduction of*  $\Theta^+$  *in*  $\gamma + D \rightarrow \Lambda + \Theta^+$  *and*  $\gamma + D \rightarrow \Sigma + \Theta^+$  *reactions*, Trento Pentaquark Workshop, ECT\*, Trento, Italy, Feb. 10-12, 2004
- 72. *Kinematics considerations of*  $\Theta^+$  *photoproduction on deuterium: rescattering diagrams*, PentaQuark 2003 Workshop, Jefferson Lab, Newport News, VA, USA, Nov. 6-8, 2003
- 73. *DVCS on spinless nuclei*, German Physics Spring Meeting (DPG) 2003, Tübingen, Germany, March 20, 2003
- 74. *Leading twist model of nuclear shadowing*, HERA III Workshop, München, Germany, Dec. 18-20, 2002

- 75. *Black body limit of DIS on nuclei and its signals*, HERA III Workshop, München, Germany, Dec. 18-20, 2002
- 76. Nuclear effects in spin structure function g<sub>1</sub> of He-3,
  3<sup>rd</sup> Circum-Pan-Pacific Symposium on High-Energy Spin Physics, Beijing, China, Oct. 8-13, 2001
- 77. Black body limit of DIS at small-x: diffractive final states, DIS 2001 workshop, Bologna, Italy, April 27-May 1, 2001

78. *Non-singlet structure function of* <sup>3</sup>*He* - <sup>3</sup>*H system and divergence of Gottfried sum rule,* Workshop on Lepton scattering, Hadrons and QCD, Adelaide, Australia, March 26-April 5, 2001

79. Role of  $\Delta(1232)$  in DIS on polarized <sup>3</sup>He and the neutron spin structure function  $g_1$ ,

14<sup>th</sup> National Congress of the Australian Institute of Physics (AIP2000), Adelaide, Australia, Dec 10-15, 2000

- 80. Role of nuclear shadowing and antishadowing in DIS on polarized nuclear targets, eRHIC BNL summer meeting, BNL USA, June 26-July 14, 2000
- 81. Nuclear shadowing in g<sub>1A</sub> at small-x deep inelastic scattering on <sup>7</sup>Li and <sup>3</sup>He,
   International Conference on Quark Nuclear Physics, Adelaide, Australia, Feb 21-25, 2000

## **Invited Seminars**

- 1. *Diffractive dijet photoproduction at EIC*, CFNS seminar, Stony Brook University, July 2, 2020 (remote talk)
- 2. *New constraints on nuclear PDFs from photon-nucleus scattering at the LHC*, 54th PNPI Winter School, Roshino, Russia, March 14, 2020
- 3. *The project of an Electron-Ion Collider in the USA*, Seminar at High Energy Physics Division, Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia, March 3, 2020
- 4. *Constraining nuclear PDFs using photon-nucleus scattering at the LHC*, seminar, Institute of Theoretical Physics, Münster University, Germany, November 4, 2019
- 5. *Exclusive photoproduction of J/ψ in perturbative QCD: progress report*, University of Jyväskylä, June 17, 2019
- 6. Inclusive dijet photoproduction in ultreperipheral heavy-ion collisions at the LHC in next-toleading order QCD, University of Jyväskylä, Dec 13, 2018

- 7. *Dijet photoproduction in UPCs at the LHC in NLO pQCD and nuclear PDFs at small x*, seminar, Institute of Theoretical Physics, Münster University, Germany, November 19, 2018
- 8. Nuclear PDFs at small x and exclusive J/ψ photoproduction in UPCs at the LHC, XLIX Arbeitstreffen Kernphysik 2018, Schleching, Germany, Feb 15-22, 2018
- 9. *Nuclear shadowing of gluons with UPCs and EIC*, informal meeting "Ultraperipheral collisions at LHC/RHIC and the EIC", Jefferson Lab, April 24, 2017 (remote presentation)
- 10. *Electron-Ion Collider*, High Energy Physics Division, Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia, April 4, 2017
- 11. Nuclear gluon distributions at small x from photoproduction of charmonia at the LHC, 51th PNPI Winter School, Roshino, Russia, March 3, 2017
- 12. *Theory overview of vector meson photoproduction on nuclei in UPCs at the LHC*, seminar at Department of Physics and Astronomy, University of Kansas, Lawrence KS, Feb 21, 2017
- Diffractive dijet photoproduction in ultraperipheral collisions at the LHC, High Energy Physics Division, Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia, May 10, 2016
- 14. Nuclear shadowing in photoproduction of light and heavy vector mesons in heavy ion ultraperipheral collisions at the LHC, Institute for High Energy Physics (IHEP), Protvino, Russia, March 31, 2016
- 15. *Photoproduction of charmonia in ultraperipheral heavy ion collisions at the LHC*, 50th PNPI Winter School, Roshino, Russia, March 1, 2016
- 16. *The gluon distributions in the proton and nuclei at small x from photoproduction of charmonia in ultraperipheral collisions at the LHC*, Institute for Nuclear Physics, Johannes Gutenberg-Universität Mainz, Germany, December 7, 2015
- 17. *The gluon distributions in the proton and nuclei at small x from photoproduction of charmonia in ultraperipheral collisions at the LHC*, Institute for Theoretical Physics, University of Tübingen, Germany, November 19, 2015
- 18. *The gluon distributions in the proton and nuclei at small x from photoproduction of charmonia in ultraperipheral collisions at the LHC*, Department of Physics, University of Münster, Germany, October 26, 2015
- 19. Results and problems in studies of processes of photoproduction of charmonia in ultraperipheral collisions at the LHC, High Energy Physics Division, Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia, October 7, 2014
- 20. Nuclear gluon distribution at small x from photoproduction of  $J/\psi$  in ion ultraperipheral collisions at the LHC, Department of Physics, University of Münster, Germany,

February 13, 2014

- Nuclear shadowing in quark and gluon distributions in nuclei: theory and applications, High Energy Physics Division, Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia, September 24, 2013
- 22. *Nuclear shadowing in quark and gluon distributions in nuclei: theory and applications*, Physics Department, St. Petersburg State University, Russia, February 26, 2013
- 23. Electron-Ion Collider: Exploring outstanding questions of nuclear physics and advancing accelerator technology, Interview talk for Skolkovo Tech, MIT, Boston, July 20, 2012
- 24. *Generalized parton distributions in nuclei*, George Washington University, Washington, D.C., January 26, 2010
- 25. Medium modifications of bound nucleon GPDs,"The Jefferson Laboratory Upgrade to 12 GeV" INT program (INT-09-3), INT, Seattle, WA, October 30, 2009
- 26. *Physics of the future Electron-Ion Collider*, HEP Division, PNPI, Gatchina, Russia, November 25, 2008
- 27. *Generalized parton distributions of nucleons and nuclei*, Interview seminar at the University of Connecticut, Storrs, CT, USA, March 24, 2008
- 28. *Dual parameterization of nucleon and nuclear GPDs*, CPhT, Ecole Polytechnique, Paris, France, February 21, 2008
- 29. *Meson degrees of freedom in nuclear DVCS*, Interview seminar at the Theory Group, Thomas Jefferson National Accelerator Facility, Newport News, VA, USA, April 18, 2007
- 30. *DVCS on nuclei and hydrogen at HERMES*, HERMES, DESY, Hamburg, Germany, November 22, 2006
- Dual parameterization of generalized parton distributions and description of DVCS data, Theory Group, Thomas Jefferson National Accelerator Facility, Newport News, VA, USA, October 19, 2006
- 32. *SU*(3) systematization of baryons and prediction of a new Λ baryon, CPhT, Ecole Polytechnique, Paris, France, January 26, 2006
- Leading twist model of nuclear shadowing, The Pennsylvania State University, State College, PA, USA, March 19, 2004
- 34. *Leading twist model of nuclear shadowing: inclusive and tagged structure functions*, Nuclear Theory Group, Brookhaven National Lab, USA, November 10, 2003

- 35. The  $\gamma + D \rightarrow \Lambda + \Theta^+$  reaction, Crystal Barrel & TAPS Collab. meeting, Bonn University, Germany, September 22, 2003
- 36. Nuclear DVCS, University of Regensburg, Germany, September 19, 2003
- 37. *The EMC effect*, Institute for Theoretical Physics II, Ruhr University, Bochum Germany, Sept. 11, 2003
- 38. Deep inelastic scattering on polarized He-3, Nuclear Theory Group, University of Washington, Seattle, WA, December 1998

## **Organization of Conferences and Workshops**

- Convener of parallel session "Collective effects in nucleon and nuclei", Electron-Ion Collider User Group Meeting 2018, The Catholic University of America, Washington, D.C., USA, July 30 - August 2, 2018
- Convener of parallel session "Future of DIS" of XIX International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS2011), Newport News, VA USA, Apr 10 – 15, 2011
- 3. Scientific coordinator of topic "Imaging QCD Matter" of INT Program "Gluons and quark sea at high energy: distributions, polarization, tomography", INT, Seattle, Sep 13 Nov 19, 2010
- 4. Convener of eA working group of the Electron-Ion Collider Collaboration, 2007-2012
- 5. Convener of session "Exclusive Reactions", Workshop on Nuclear QCD studies with a future Electron-Ion Collider, Argonne National Laboratory, April 7 9, 2010
- 6. Convener of eA parallel session of the IV Electron-Ion Collider Workshop, Hampton University, USA, May 19 23, 2008
- 7. Organizer of workshop "Exotic Hadrons", ECT\*, Trento, Italy, February 21-25, 2005
- 8. Organizer of workshop "Pentaquark states: structure and properties", ECT\*, Trento, Italy, February 10 12, 2004
- 9. Local organizer of workshop "Physics at the Japan Hadron Facility (JHF)", Adelaide, Australia, March 14 21, 2002

#### **Professional Service**

- Reviewer for *Physical Reviews C* and *D*, *Physics Letters B*, *Journal of Physics G*, *European Physical Journal C*, *Nuclear Physics A*, and *Physica Scripta*
- Reviewer for the Office of Nuclear Physics, U.S. Department of Energy (DOE, USA), FONDECYT (Chile), National Science Centre (Poland)
- INSPIRE keyword project

#### References

- Prof. Mark Strikman Physics Department The Pennsylvania State University
- Dr. Christian Weiss Lead Scientist Jefferson Lab
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