

CURRICULUM VITAE

Date: July 18, 2021

Full name: Vladimirov Alexey

Date and place of birth: 2th November 1983
Irkutsk, Russia

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EDUCATION & DEGREES

Ph.D. in Physics with Summa cum laude *Dec. 2010*
Ruhr University, Bochum, Germany
Thesis title: Infrared logarithms in Effective field Theories.
Supervisor: Prof. Dr. M.V. Polyakov

Diploma in Physics with Summa cum laude *Jun. 2006*
Irkutsk State University, Irkutsk, Russia

Diploma (Master) student *Nov. 2005 - May 2006*
Joint Institute for Nuclear Research, Dubna, Russia
Diploma title: ERBL and DGLAP evolution of transversely polarized parton distributions at two-loop order.
Supervisor: Dr. S.V. Mikhailov

Undergraduate student *Sep. 2001 -Jun. 2005*
Irkutsk State University, Irkutsk, Russia
Specialization: Quantum Field Theory, Particle Physics, High Energy Physics.
Term paper: Spatial description of hard processes on the $SO(2,1)$ -group.

LINGUISTIC SKILLS

Russian: mother tongue

English: C1 (self-assessment)

German: A2-B1 (self-assessment)

CURRENT POSITION

Position: Akademischer Rat auf Zeit (fixed term lecturer)
Employer: Universität Regensburg, Germany
Start/End date 1. Sep. 2015 - 31 Oct. 2022
Contact Address: Lehrstuhl Braun, Fakultät Physik
Universität Regensburg,
D-93040 Regensburg, Germany
Job description: Research, teaching (5 hours/week), student advisory

EMPLOYMENT HISTORY

Lund University, Sweden *May 2013 - Jul.2015*
Post.Doc. position at the Department of Astronomy and Theoretical Physics

Ruhr-University, Bochum, Germany *Jan. 2011 - Apr.2013*
Post.Doc. position at the Institute for Theoretical Physics II

Ruhr University, Bochum, Germany *Sep. 2008 - Dec. 2010*
PhD student at the Institute for Theoretical Physics II,
Supervisor: Prof. Dr. M.V. Polyakov

Joint Institute for Nuclear Research, Dubna, Russia *Sep. 2006 - Sep. 2008*
PhD student (aspirant) at the Educational Center of the Joint
Institute for Nuclear Research
Supervisor: Prof. Dr. A.V. Efremov

RESEARCH FUNDING

- Deutsche Forschungsgemeinschaft (DFG) research unit (FOR 2926)
Title: “Next Generation Perturbative QCD for Hadron Structure: Preparing for the Electron-Ion Collider”
Status: Granted, (Oct.2019-Oct.2022).
Role: Principal investigator (PI), the scientific leader of project 4 “*Das TransversalimpulsSpektrum von semi-inklusive Reaktionen*” (project number: 430824754)
Amount of funding: total: 2M.€;
personal part: 1 postdoc position + 51 400€ (= 285 100€ for 3 years).
Spoken person: V.Braun (Regensburg University)
Role in preparation of funding applications: The author and the presenter of the sub-project 4, the co-author of the sub-project 3.
- PRACE project (call 17)
Title: “Scale dependence of TMDs”
Status: Granted 44 M core hours on SuperMUC (Oct.2018-May 2021).
Role: The leader of theory development
Role in preparation of funding applications: Author of the project.
- Deutsche Forschungsgemeinschaft (DFG) individual research grants (programme 2017)
Title: “Theory and phenomenology of Polarized Transverse Momentum distributions with pQCD”.
Status: Excellently reviewed. Not-granted due to fund restrictions.
Role in preparation of funding applications: The author of the project

LEADERSHIP (CURRENTLY)

- Deutsche Forschungsgemeinschaft (DFG) research unit (FOR 2926): principle investigator (PI) of project 4 and 3B.
- Regensburg lattice group: the leading theoretician of the group “Scale dependence of transverse momentum distributions from QCD lattice”.

AWARDS

- “Garry McCartor Award”, May 22 2013, granted by ILCAC (the International Light Cone Advisory Committee)

COMMUNITY SERVICE

- **Convener of the working group** “Hadron semi-inclusive reaction” for EIC Yellow Report, particular responsibility for “Nucleon transverse-momentum structure” program (currently).
- **Guest editor** for the Special Issue “Transverse Momentum Dependent Observables from Low to High Energy: Factorization, Evolution, and Global Analyses” published in *Advances in High Energy Physics*, vol. 2019 (24 Jun 2019).
- Organizer of “semi-inclusive reaction” session at the EIC IECUG meetings during 2020.
- A member of “ p_T/W ” working group at LHC, and TMDlib working group.
- Referee for *Journal of High Energy Physics (JHEP)*, *Nuclear Physics B*, *Physical Review D* and *Physical Review Letter*.

SCIENTIFIC AND SOCIETAL IMPACT OF RESEARCH

Publication summary (according to inspire database):

69 publications in total
48 in peer-reviewed journals
9 (peer-review) articles are single-authored
4 publications in *Phys.Rev.Lett.* (2 single-authored)
h-index = 21

Merits related to the production and distribution of research results and research data:

- The author and main developer of **artemide** package (*FORTRAN*, *Python*) for phenomenology of transverse momentum dependent distributions.
web-page: <https://teorica.fis.ucm.es/artemide/>
repository: <https://github.com/VladimirovAlexey/artemide-public>
repository(dev): <https://github.com/VladimirovAlexey/artemide-development>
- The author of **etaDA** code (*FORTRAN*) for analysis of $\gamma^*\gamma^* \rightarrow \eta(\eta')$
web-page: <http://avladimirov.net/index.php/projects/extra-materials>
- The author of **SimpleGroups** package (*Mathematica*) for group-theory calculus (currently not supported)
web-page: <http://avladimirov.net/index.php/projects/extra-materials>

Teaching experience

SUPERVISION

Felix Rein master student Topic: NLO matching for Boer-Mulders function Supervisory role: Supervisor Place: University Regensburg	<i>currently</i>
Malin Horstmann master student Topic: Single-spin asymmetries in the W/Z production Supervisory role: Supervisor Place: University Regensburg	<i>currently</i>
Marcin Bury postdoc Topic: Phenomenology of TMD distributions (Sivers function, estimation of PDF uncertainty) Place: University Regensburg	<i>2020-2021</i>
Valentin Moos master student Topic: Matching of Pretzelocity-distribution at small values of b Supervisory role: Supervisor Place: University Regensburg	<i>2020</i>
Hengameh Bagherian student of MIT MISTI program Topic: Non-perturbative definition of rapidity anomalous dimension Supervisory role: Supervisor Place: University Regensburg	<i>2019</i>
Valentin Moos bachelor student Topic: Study of truncation error in TMD evolution Supervisory role: Supervisor Place: University Regensburg	<i>2018</i>
Victor Svensson master student Topic: Generating functional for web-diagrams at NNLO Supervisory role: Main supervisor Place: Lund University	<i>2014 - 2015</i>
Julia Koschinski Ph.D.Student Topic: Resummation of logarithms in low energy effective field theories. Supervisory role: Supervisor Place: Ruhr-University, Bochum	<i>2010 - 2011</i>
Julia Koschinski master student Topic: Perturbative corrections in low energy effective field theories using unitarity and analyticity. Supervisory role: Supervisor Place: Ruhr-University, Bochum	<i>2010 - 2011</i>

LIST OF GIVEN COURSES

- Regensburg University:
Course of Quantum field theory III *summer semester 2021*
Exercises for Structure of Matter III *winter semester 2020-2021*

Exercises for Quantum Mechanics I	<i>summer semester 2020</i>
Exercises for Structure of Matter III	<i>winter semester 2019-2020</i>
Exercises for Classical Mechanics	<i>summer semester 2019</i>
Exercises for Structure of Matter III	<i>winter semester 2018-2019</i>
Exercises for Classical Mechanics	<i>summer semester 2018</i>
Exercises for Structure of Matter III	<i>winter semester 2017-2018</i>
Exercises for Quantum Field Theory I	<i>summer semester 2017</i>
Exercises (and lectures) for Quantum Field Theory II	<i>winter semester 2016-2017</i>
Exercises (and lectures) for Quantum Field Theory III	<i>summer semester 2016</i>
Exercises for Quantum Mechanics II	<i>winter semester 2015-2016</i>

- Lund University:
 - Course of Quantum field theory (FYTN10)** *winter semester 2015*
(lectures and exercises)
 - Course of Quantum field theory (FYTN10)** *winter semester 2014*
(lectures and exercises)
- Ruhr University:
 - Exercises for Quantum Mechanics**(for non-physics students) *winter semester 2012-2013*
 - Exercises for General Relativity** *winter semester 2011-2012*
 - Exercises for Quantum Mechanics II** *winter semester 2010-2011*
 - Exercises for Calculus** *summer semester 2010*
 - Exercises for Advanced Theoretical Mechanics** *winter semester 2008-2009*

INVITED COURSES

- **Lecture course “Modern quantum field theory”** *26-30 Nov. 2018*
SA-CERN summer school 2018: *Physics of the LHC*
Place: University of Cape Town, South Africa
- **Lecture course “Group theory and particle physics”** *March, 2013*
Place: Irkutsk State University
- **Lecture course “Methods of Modern Quantum Chromodynamics”** *July, 2010*
10th Baikal Summer School on Physics of Elementary Particles and Astrophysics
Place: Bolshie Koty, Russia

List of publications

10 Most important publication have highlighted numbers

A: PEER-REVIEWED SCIENTIFIC ARTICLES

1. M. Schlemmer, A. Vladimirov, C. Zimmermann, M. Engelhardt and A. Schäfer,
“Determination of the Collins-Soper Kernel from Lattice QCD,”
[arXiv:2103.16991 [hep-lat]].
2. V. M. Braun, Y. Ji and A. Vladimirov,
“QCD factorization for twist-three axial-vector parton quasidistributions,”
JHEP **05** (2021), 086 [arXiv:2103.12105 [hep-ph]].
3. N. A. Abdulov, A. Bacchetta, S. Baranov, A. B. Martinez, V. Bertone, C. Bissolotti, V. Candelise,
L. I. Estevez Banos, M. Bury and P. L. S. Connor, *et al.*
“TMDlib2 and TMDplotter: a platform for 3D hadron structure studies,”
[arXiv:2103.09741 [hep-ph]].
4. M. Bury, A. Prokudin and A. Vladimirov,
“Extraction of the Sivers function from SIDIS, Drell-Yan, and W^\pm/Z boson production data with
TMD evolution,”
JHEP **05** (2021), 151 [arXiv:2103.03270 [hep-ph]].
5. M. Bury, A. Prokudin and A. Vladimirov,
“Extraction of the Sivers Function from SIDIS, Drell-Yan, and W^\pm/Z Data at Next-to-Next-to-
Next-to Leading Order,”
Phys. Rev. Lett. **126** (2021) no.11, 112002 [arXiv:2012.05135 [hep-ph]].
6. V. Moos and A. Vladimirov,
“Calculation of transverse momentum dependent distributions beyond the leading power,”
JHEP **12** (2020), 145 [arXiv:2008.01744 [hep-ph]].
- 7** A. A. Vladimirov,
“Self-contained definition of the Collins-Soper kernel,”
Phys. Rev. Lett. **125** (2020) no.19, 192002 [arXiv:2003.02288 [hep-ph]].
8. F. Hautmann, I. Scimemi and A. Vladimirov,
“Non-perturbative contributions to vector-boson transverse momentum spectra in hadronic collisions,”
Phys. Lett. B **806** (2020), 135478 [arXiv:2002.12810 [hep-ph]].
9. A. A. Vladimirov and A. Schäfer,
“Transverse momentum dependent factorization for lattice observables,”
Phys. Rev. D **101** (2020) no.7, 074517 [arXiv:2002.07527 [hep-ph]].
- 10** I. Scimemi and A. Vladimirov,
“Non-perturbative structure of semi-inclusive deep-inelastic and Drell-Yan scattering at small
transverse momentum,”
JHEP **06** (2020), 137 [arXiv:1912.06532 [hep-ph]].
11. A. Vladimirov,
“*Pion-induced Drell-Yan processes within TMD factorization,*”
JHEP **1910**, 090 (2019) [arXiv:1907.10356 [hep-ph]].
12. D. Gutierrez-Reyes, S. Leal-Gomez, I. Scimemi and A. Vladimirov,
“*Linearly polarized gluons at next-to-next-to leading order and the Higgs transverse momentum
distribution,*”
JHEP **1911**, 121 (2019) [arXiv:1907.03780 [hep-ph]].

13. V. Bertone, I. Scimemi and A. Vladimirov,
“Extraction of unpolarized quark transverse momentum dependent parton distributions from Drell-Yan/Z-boson production,”
 JHEP **1906**, 028 (2019) [arXiv:1902.08474 [hep-ph]].
14. Y. Ji and A. Vladimirov,
“What can be learned from the transition form factor of $\gamma^\gamma^* \rightarrow \eta'$: feasibility study,”*
 Eur. Phys. J. C **79**, no. 4, 319 (2019) [arXiv:1901.06960 [hep-ph]].
- 15** I. Scimemi, A. Tarasov and A. Vladimirov,
“Collinear matching for Sivers function at next-to-leading order,”
 JHEP **1905**, 125 (2019) [arXiv:1901.04519 [hep-ph]].
16. M. V. Polyakov, K. M. Semenov-Tian-Shansky, A. O. Smirnov and A. A. Vladimirov,
“Quasirenormalizable Quantum Field Theories,”
 Theor. Math. Phys. **200**, no. 2, 1176 (2019) [arXiv:1811.08449 [hep-th]].
17. V. M. Braun, A. Vladimirov and J. H. Zhang,
“Power corrections and renormalons in parton quasidistributions,”
 Phys. Rev. D **99**, no. 1, 014013 (2019) [arXiv:1810.00048 [hep-ph]].
18. D. Gutierrez-Reyes, I. Scimemi and A. Vladimirov,
“Transverse momentum dependent transversely polarized distributions at next-to-next-to-leading-order,”
 JHEP **1807**, 172 (2018) [arXiv:1805.07243 [hep-ph]].
19. I. Scimemi and A. Vladimirov,
“Matching of transverse momentum dependent distributions at twist-3,”
 Eur. Phys. J. C **78**, no. 10, 802 (2018) [arXiv:1804.08148 [hep-ph]].
- 20** I. Scimemi and A. Vladimirov,
“Systematic analysis of double-scale evolution,”
 JHEP **1808**, 003 (2018) [arXiv:1803.11089 [hep-ph]].
21. B. Ananthanarayan, S. Ghosh, A. Vladimirov and D. Wyler,
“Leading Logarithms of the Two Point Function in Massless $O(N)$ and $SU(N)$ Models to any Order from Analyticity and Unitarity,”
 Eur. Phys. J. A **54**, no. 7, 123 (2018) [arXiv:1803.07013 [hep-ph]].
- 22** A. Vladimirov,
“Structure of rapidity divergences in multi-parton scattering soft factors,”
 JHEP **1804**, 045 (2018) [arXiv:1707.07606 [hep-ph]].
23. I. Scimemi and A. Vladimirov,
“Analysis of vector boson production within TMD factorization,”
 Eur. Phys. J. C **78**, no. 2, 89 (2018) [arXiv:1706.01473 [hep-ph]].
24. D. Gutiérrez-Reyes, I. Scimemi and A. A. Vladimirov,
“Twist-2 matching of transverse momentum dependent distributions,”
 Phys. Lett. B **769**, 84 (2017) [arXiv:1702.06558 [hep-ph]].
- 25** A. A. Vladimirov,
“Correspondence between Soft and Rapidity Anomalous Dimensions,”
 Phys. Rev. Lett. **118**, no. 6, 062001 (2017) [arXiv:1610.05791 [hep-ph]].
26. I. Scimemi and A. Vladimirov,
“Power corrections and renormalons in Transverse Momentum Distributions,”
 JHEP **1703**, 002 (2017) [arXiv:1609.06047 [hep-ph]].

27. A. Vladimirov,
“*Soft factors for double parton scattering at NNLO,*”
JHEP **1612**, 038 (2016) [arXiv:1608.04920 [hep-ph]].
- 28** M. G. Echevarria, I. Scimemi and A. Vladimirov,
“*Unpolarized Transverse Momentum Dependent Parton Distribution and Fragmentation Functions at next-to-next-to-leading order,*”
JHEP **1609**, 004 (2016) [arXiv:1604.07869 [hep-ph]].
29. V. M. Braun, N. Kivel, M. Strohmaier and A. A. Vladimirov,
“*Electroproduction of tensor mesons in QCD,*”
JHEP **1606**, 039 (2016) [arXiv:1603.09154 [hep-ph]].
- 30** M. G. Echevarria, I. Scimemi and A. Vladimirov,
“*Universal transverse momentum dependent soft function at NNLO,*”
Phys. Rev. D **93**, no. 5, 054004 (2016) [arXiv:1511.05590 [hep-ph]].
31. M. G. Echevarria, I. Scimemi and A. Vladimirov,
“*Transverse momentum dependent fragmentation function at next-to-next-to-leading order,*”
Phys. Rev. D **93**, no. 1, 011502 (2016)
Erratum: [Phys. Rev. D **94**, no. 9, 099904 (2016)] [arXiv:1509.06392 [hep-ph]].
32. A. A. Vladimirov,
“*Exponentiation for products of Wilson lines within the generating function approach,*”
JHEP **1506**, 120 (2015) [arXiv:1501.03316 [hep-th]].
33. J. Bijnens and A. A. Vladimirov,
“*Leading logarithms for the nucleon mass,*”
Nucl. Phys. B **891**, 700 (2015) [arXiv:1409.6127 [hep-ph]].
34. A. A. Vladimirov,
“*Generating function for web diagrams,*”
Phys. Rev. D **90**, no. 6, 066007 (2014) [arXiv:1406.6253 [hep-th]].
35. A. A. Vladimirov,
“*TMD PDFs in the Laguerre polynomial basis,*”
JHEP **1408**, 089 (2014) [arXiv:1402.3182 [hep-ph]].
36. D. Diakonov, V. Petrov and A. A. Vladimirov,
“*A theory of baryon resonances at large N_c ,*”
Phys. Rev. D **88**, no. 7, 074030 (2013) [arXiv:1308.0947 [hep-ph]].
37. A. M. Moiseeva and A. A. Vladimirov,
“*On chiral corrections to nucleon GPD,*”
Eur. Phys. J. A **49**, 23 (2013) [arXiv:1208.1714 [hep-ph]].
38. A. A. Vladimirov and D. Diakonov,
“*Phase transitions in spinor quantum gravity on a lattice,*”
Phys. Rev. D **86**, 104019 (2012) [arXiv:1208.1254 [hep-th]].
39. D. I. Diakonov, V. Y. Petrov and A. A. Vladimirov,
“*Baryon resonances in the relativistic mean field approach,*”
Theor. Math. Phys. **170**, 114 (2012)
- 40** D. Diakonov, A. G. Tumanov and A. A. Vladimirov,
“*Low-energy General Relativity with torsion: A Systematic derivative expansion,*”
Phys. Rev. D **84**, 124042 (2011) [arXiv:1104.2432 [hep-th]].

41. M. V. Polyakov and A. A. Vladimirov,
“Leading Infrared Logarithms for Sigma-Model with Fields on Arbitrary Riemann Manifold,”
 Theor. Math. Phys. **169**, 1499 (2011) [arXiv:1012.4205 [hep-th]].
42. J. Koschinski, M. V. Polyakov and A. A. Vladimirov,
“Leading Infrared Logarithms from Unitarity, Analyticity and Crossing,”
 Phys. Rev. D **82**, 014014 (2010) [arXiv:1004.2197 [hep-ph]].
43. N. A. Kivel, M. V. Polyakov and A. A. Vladimirov,
“Leading Chiral Logarithms for Pion Form Factors to Arbitrary Number of Loops,”
 JETP Lett. **89**, 529 (2009) [arXiv:0904.3008 [hep-ph]].
44. S. V. Mikhailov and A. A. Vladimirov,
“ERBL and DGLAP kernels for transversity distributions. Two-loop calculations in covariant gauge,”
 Phys. Lett. B **671**, 111 (2009) [arXiv:0810.1647 [hep-ph]].
- 45** N. Kivel, M. V. Polyakov and A. Vladimirov,
“Chiral Logarithms in the Massless Limit Tamed,”
 Phys. Rev. Lett. **101**, 262001 (2008) [arXiv:0809.3236 [hep-ph]].
46. N. Kivel, M. V. Polyakov and A. Vladimirov,
“Large- N Summation of Chiral Logs for Generalized Parton Distributions,”
 Phys. Rev. D **79**, 014028 (2009) [arXiv:0809.2064 [hep-ph]].
47. O. N. Soldatenko, A. N. Vall and A. A. Vladimirov,
“Unitarization of elastic amplitude on $SO(\mu)(2.1)$ group,”
 Eur. Phys. J. A **38**, 71 (2008) [arXiv:0805.2296 [hep-ph]].

B: NON-REFEREED SCIENTIFIC ARTICLES

1. D. Gutierrez-Reyes, I. Scimemi and A. Vladimirov,
“Twist-2 Transverse Momentum Distributions at Next-to-next-to-leading Order in QCD,”
 Acta Phys. Polon. Supp. **12**, no. 4, 849 (2019).
2. D. G. Reyes, I. Scimemi and A. Vladimirov,
“Twist-2 matching of transverse momentum dependent distributions at next-to-next-to-leading-order in QCD,”
 PoS SPIN **2018**, 055 (2019).
3. A. Vladimirov,
“TMD evolution as a double-scale evolution,”
 PoS SPIN **2018**, 054 (2019).
4. S. Leal Gómez, D. Gutierrez-Reyes, I. Scimemi and A. Vladimirov,
“Linearly polarized gluons Transverse Momentum Dependent Parton Distribution Function at NNLO in QCD,”
 PoS DIS **2019**, 183 (2019) [arXiv:1908.05924 [hep-ph]].
5. D. Gutiérrez-Reyes, I. Scimemi and A. Vladimirov,
“Twist-2 transverse momentum dependent distributions,”
 PoS RADCOR **2017**, 040 (2018).
6. A. Vladimirov,
“Structure of transverse momentum dependent (TMD) distributions at NNLO,”
 PoS QCDEV **2016**, 030 (2017).

7. A. A. Vladimirov,
"TMD Fragmentation Function at NNLO,"
 PoS QCDEV **2015**, 044 (2015).
8. J. Bijnens, K. Kampf and A. Vladimirov,
"Leading logarithms for mesons and nucleons,"
 PoS CD **15**, 029 (2016) [arXiv:1509.07403 [hep-ph]].
9. A. A. Vladimirov and J. Bijnens,
"Leading chiral logarithms for the nucleon mass,"
 AIP Conf. Proc. **1701**, no. 1, 040019 (2016) [arXiv:1501.03979 [hep-ph]].
10. A. A. Vladimirov and D. Diakonov,
"Diffeomorphism-invariant lattice actions,"
 Phys. Part. Nucl. **45**, no. 4, 800 (2014).
11. A. Vladimirov,
"TMDs in Laguerre polynomial basis,"
 PoS DIS **2014**, 034 (2014) [arXiv:1407.0965 [hep-ph]].
12. A. A. Vladimirov and N. G. Stefanis,
"Key features of the TMD soft-factor structure,"
 Few Body Syst. **55**, 297 (2014) [arXiv:1401.3663 [hep-ph]].
13. A. V. Efremov and A. A. Vladimirov,
"Causality constraints on TMD PDF,"
 arXiv:1306.3929 [hep-ph].
14. A. Moiseeva and A. A. Vladimirov,
"Chiral Expansion of Nucleon PDF at $x \approx m_\pi/M_N$,"
 Few Body Syst. **55**, 389 (2014) [arXiv:1311.3433 [hep-ph]].
15. D. Diakonov, V. Petrov and A. A. Vladimirov,
"Baryon resonances at large N_c , or Quark Nuclear Physics,"
 PoS QNP **2012**, 084 (2012) [arXiv:1207.3679 [hep-ph]].
16. I. A. Perevalova, M. V. Polyakov, A. N. Vall and A. A. Vladimirov,
"Chiral Inflation of the Pion Radius,"
 arXiv:1105.4990 [hep-ph].
17. A. N. Vall, I. A. Perevalova, O. N. Soldatenko and A. A. Vladimirov,
"Spatial description of the particle production region in elastic and quasi-elastic processes on the $SO(\mu)(2.1)$ group,"
 Phys. Part. Nucl. **40**, 1030 (2009).
18. A. N. Vall, O. N. Soldatenko and A. A. Vladimirov,
"Spatial structure of a particle collision region and its relationship with the angular distribution of a detectable particle,"
 Russ. Phys. J. **51**, 587 (2008) [Izv. Vuz. Fiz. **51N6**, 33 (2008)].
19. N. Bobrovskaya, A. N. Vall, M. V. Polyakov and A. A. Vladimirov,
"Spatial image of reaction area from scattering. II. On connection between the differential cross-sections in transverse momentum and in nearest approach parameter,"
 arXiv:0709.3398 [hep-ph].
20. M. V. Polyakov, O. N. Soldatenko, A. N. Vall and A. A. Vladimirov,
"Spatial image of hadrons from scattering. I. $SO(\mu)(2.1)$ algebra formalism,"
 arXiv:0708.2857 [hep-ph].

C: COMMUNITY PAPERS

1. R. Abdul Khalek, A. Accardi, J. Adam, D. Adamiak, W. Akers, M. Albaladejo, A. Al-bataineh, M. G. Alexeev, F. Ameli and P. Antonioli, *et al.*
“Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report,” [arXiv:2103.05419 [physics.ins-det]].
Role: Convener and author of “Parton imagining in momentum space”-section.
2. R. Angeles-Martinez *et al.*,
“*Transverse Momentum Dependent (TMD) parton distribution functions: status and prospects,*”
Acta Phys. Polon. B **46**, no. 12, 2501 (2015) [arXiv:1507.05267 [hep-ph]].

D: THESES

1. A. A. Vladimirov,
“*Infrared logarithms in effective field theories,*”
PhD thesis, Bochum, 2010

Conference participation

only last 5 years are presented

2021

QCD evolution 2021, Los Angeles (*online*), May.2021

Invited talk: Sivers and Qiu-Sterman functions from SIDIS and Drell-Yan data

Workshop on from JLab to EIC, JLab (*online*), May.2021

Plenary talk: Extraction of TMD distributions from data

DIS 2021, Stony Brook (*online*), Apr.2021

Invited talk: N³LO extraction of the Sivers function from SIDIS, Drell-Yan, and W/Z data

World SCET 2021 (*online*), Apr.2021

Poster presentation: Twist decomposition for TMD operators

Moriond QCD, Moriond (*online*), Apr.2021

Invited talk: Extraction of Transverse momentum dependent distributions

Workshop on the Second interaction region at EIC, Miami (*online*), Mar.2021

Invited talk: TMD distributions & TMD evolution

2020

Resummation, evolution, factorization, 2020, Edinburgh (*online*), Dec.2020

Invited talk: Rapidity anomalous dimension: theory and practice

IWHSS, 2020, Triest (*online*), Nov.2020

Invited talk: Extraction of unpolarized TMDs from Drell-Yan and SIDIS data

Snowmass, 2021 (preliminary TMD session), *online*, Oct.2020

Invited talk: Status of TMD studies

LaMeT, 2020 (*online*), Sep.2020

Plenary talk: Transverse momentum dependent factorization for lattice observables

Workshop on Pion and Kaon Structure Functions at the EIC (*online*), Sep.2020

Invited talk: Pion-induced Drell-Yan and pion TMD distribution

Correlations in Partonic and Hadronic Interactions (CPHI-2020) CERN, Geneva, Feb.2020

Invited talk: Description of unpolarized Drell-Yan and SIDIS processes within TMD factorization

Workshop "Challenges of QCD EFTs" Madrid, Jan.2020

Invited talk: Collins-Soper kernel: non-perturbative studies

2019

Resummation, evolution, factorization, 2019, Pavia, Dec.2019

Invited talk: Unpolarized TMD distributions and their evolution from DY and SIDIS data

MCEGs for future ep and eA facilities, Vienna, Nov.2019

Invited talk: TMD factorization and artemide

DSpin-2019, Dubna (Russia), Sep.2019

Invited talk: Transverse momentum dependent distributions in perturbation theory

XLVII International Meeting on Fundamental Physics (IMFP19), Aranjuez (Spain), Jun.2019

Plenary talk: Nucleon Tomography

DIS-2019, Torino, Apr.2019

Invited talk: Extraction of transverse momentum dependent parton distribution functions

2018

Spin 2018, Ferrara (Italy), Sep.2018

Invited talk: TMD evolution as a double-scale evolution

QCD evolution 2018, Santa Fe (USA), May.2018

Invited talk: TMD evolution as a double-scale evolution

8th International conference on Physics Opportunities at an Electron-Ion-Collider (PO-ETIC8), Regensburg, Mar.2018

Invited talk: Transverse momentum dependent (TMD) factorization in perturbation theory

DPG meeting 2018, Bochum (Germany), Mar.2018

Plenary talk: Transverse momentum dependent (TMD) factorization: status and progress

2017

Resummation, evolution, factorization, 2017, Madrid, Nov.2017

Plenary talk: Extraction of unpolarized TMD PDFs at NNLO: analysis and result

Invited talk: Geometrical structure of soft gluon radiation.

Spatial and Momentum Tomography of Hadrons and Nuclei, 2017, Seattle, Sep.2017

Invited talk: Extraction of unpolarized TMD PDFs at NNLO: analysis and result

Electron-Ion-Collider User group meeting, Trieste, Jul.2017

Invited talk: Limits and uncertainties of TMD factorization

2016

SFB-55 meeting, 2016, Regensburg, Oct.2016

Invited talk: Transverse momentum dependent (TMD) distributions: definition and perturbative consideration

QCD evolution, 2016, Amsterdam, Jun.2016

Invited talk: Transverse momentum dependent (TMD) distributions at NNLO

SCET, 2016, Hamburg, Feb.2016

Invited talk: Structure of transverse momentum dependent (TMD) distributions at NNLO

SEMINARS

Temple University, *online*, May.2020

Title: QCD factorization for quasi-parton distributions at twist-three level

Parton branching collaboration, *online*, Apr.2021

Title: Collins-Soper kernel from evenT generators

Madrid University, *online*, Oct.2020

Title: Parton distributions with lattice QCD: how it works.

Regensburg University, *online*, Jun.2020

Title: Self-contained and non-perturbative definition of Collins-Soper kernel

Torino University, *online*, Jun.2020

Title: Generating function of web-diagrams: theory and applications

Mainz University, Oct.2019

Title: Evolution of transverse momentum dependent distributions

Bern University, Sep.2019

Title: Evolution of transverse momentum dependent distributions

Regensburg University, Jun.2019

Title: Extraction of transverse momentum dependent parton distributions

Technical University Munchen (TUM), Feb.2019

Title: Renormalization theorem for rapidity divergences & rapidity anomalous dimension

Brookhaven National Laboratory (BNL), May 2018

Title: TMD evolution as a double-scale evolution

Regensburg University, May 2018

Title: TMD evolution as a double-scale evolution

Pavia University, Feb 2018

Title: Anatomy TMD evolution: solution ambiguity, ζ -prescription and all that

Higgs Centrum, Edinburgh, Jan.2018

Title: Structure of rapidity divergences in soft factors & rapidity renormalization theorem

Massachusetts Institute of Technology (MIT), Boston, Oct.2017

Title: Structure of rapidity divergences in soft factors & rapidity renormalization theorem

Regensburg University, May 2017

Title: Rapidity divergence renormalization theorem

DESY, Hamburg, Feb.2017

Title: Soft/rapidity anomalous dimensions correspondence & rapidity renormalization theorem

Ruhr-University, Bochum, Dec.2016

Title: Soft/rapidity anomalous dimensions correspondence & rapidity renormalization theorem