

# Samuel WALLON

## Publications and talks

total INSPIRES: 9000+ citations, hHEP=42; published: 5700+ citations, hHEP=36.  
for a complete list in INSPIRES:

<https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=author%3Asamuel.wallon.1&ui-citation-summary=true>

in Google Scholar:

<https://scholar.google.fr/citations?user=hkDDVw4AAAAJ&hl=fr>

## Overview table:

166 publications among which:

- **58 articles in international peer-reviewed journals** (+1 submitted)
- 91 international peer-reviewed conferences and published proceedings
- 17 technical reports, experimental proposals, review article.

106 talks among which:

- 63 presentations at international conferences and workshops
- 43 presentations at national workshops and laboratory seminars

1 outreach film

## Detailed list of publications (in chronological order):

### Articles in international peer-reviewed journals:

- [1] E.Buffenoir et S.Wallon, *The correlation length of the Potts model at the first-order transition point*, J. Phys. A: Math. Gen. **26** (1993) 3045-3062.
- [2] H.Navelet, R.Peschanski et S.Wallon, *On the singular behaviour of structure function at low  $x$* , Mod. Phys. Lett. **A9** (1994) 3393-3402.
- [3] R.Peschanski et S.Wallon, *Unified QCD evolution equations and the dominant behaviour of structure functions at low  $x$* , Phys. Lett. **B349** (1995) 357-362.

- [4] Z.Maassarani et S.Wallon, *Baxter Equation for the QCD Odderon*, J. Phys. A: Math. Gen. **28** (1995) 6423-6434.
- [5] H. Navelet, R. Peschanski, Ch. Royon et S. Wallon, *Proton structure functions in the dipole picture of BFKL dynamics*, Phys. Lett. **B385** (1996) 357-364.
- [6] H. Navelet, R. Peschanski, Ch. Royon, L. Schoeffel et S. Wallon, *On the origin of the rise of  $F_2$  at small  $x$* , Mod. Phys. Lett. **A12** (1997) 887-897.
- [7] Y. Kovchegov, A.H. Mueller et S. Wallon, *Unitarity Corrections and High Field Strengths in High Energy Hard Collisions*, Nucl. Phys. **B507** (1997) 367-378.
- [8] H. Navelet et S. Wallon, *Onium-Onium scattering at fixed impact parameter: exact equivalence between the color dipole model and the BFKL Pomeron*, Nucl. Phys. **B522** (1998) 237-281.
- [9] M. Boonekamp, A. De Roeck, Ch. Royon et S. Wallon,  *$\gamma^* - \gamma^*$  total cross-section in the dipole picture of BFKL dynamics*, Nucl.Phys. B555 (1999) 540-564.
- [10] S. Munier et S. Wallon, *Geometric scaling in exclusive processes*, Eur.Phys.J.C30 (2003) 359-365.
- [11] Y. V. Kovchegov, L. Szymanowski et S. Wallon, *Perturbative Odderon in the dipole model*, Phys.Lett.B586 (2004) 267-281.
- [12] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *Deep Electroproduction of exotic hybrid mesons*, Phys.Rev.D70 (2004) 011501.
- [13] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *Exotic hybrid mesons in hard electroproduction*, Phys.Rev.D71 (2005) 034021.
- [14] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *On BLM scale fixing in exclusive processes*, Eur.Phys.J.C42 (2005) 163-168.
- [15] B. Pire, L. Szymanowski et S. Wallon, *Double diffractive  $\rho$ -production in  $e^+e^-$ -collisions*, Eur.Phys.J.C44 (2005) 545-558.
- [16] R. Enberg, B. Pire, L. Szymanowski et S. Wallon, *BFKL resummation effects in  $\gamma^*\gamma^* \rightarrow \rho\rho$* , Eur.Phys.J.C45 (2006) 759-769 [Erratum-ibid. C **51** (2007) 1015].
- [17] A. Shuvaev et S. Wallon, *High energy evolution of soft gluon cascades*, Eur.Phys.J.C46 (2006) 135-145.
- [18] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *On exotic hybrid meson production in  $\gamma^*\gamma$  collision*, Eur.Phys.J.C47 (2006) 71-79.

- [19] B. Pire, M. Segond, L. Szymanowski et S. Wallon, *QCD factorizations in  $\gamma^*\gamma^* \rightarrow \rho_L^0\rho_L^0$* , Phys.Lett.B639 (2006) 642-651.
- [20] M. Segond, L. Szymanowski et S. Wallon, *Diffraction production of two rho0(L) mesons in  $e^+e^-$  collisions*, Eur. Phys. J. C **52** (2007) 93.
- [21] B. Pire, C. Roiesnel, L. Szymanowski and S. Wallon, *On AdS/QCD correspondence and the partonic picture of deep inelastic scattering*, Phys. Lett. B **670** (2008) 84-90.
- [22] M. E. Beiyad, B. Pire, L. Szymanowski and S. Wallon, *Diphoton Generalized Distribution Amplitudes*, Phys. Rev. D **78** (2008) 034009.
- [23] B. Pire, F. Schwennsen, L. Szymanowski and S. Wallon, *Hard Pomeron-Odderon interference effects in the production of  $\pi^+\pi^-$  pairs in high energy gamma-gamma collisions at the LHC*, Phys. Rev. D **78** (2008) 094009.
- [24] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *On the description of exclusive processes beyond the leading twist approximation*, Phys. Lett. B **682** (2010) 413-418.
- [25] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *QCD factorization of exclusive processes beyond leading twist:  $\gamma_T^* \rightarrow \rho_T$  impact factor with twist three accuracy*, Nucl. Phys. B **828** (2010) 1-68.
- [26] M. E. Beiyad, B. Pire, M. Segond, L. Szymanowski and S. Wallon, *Photoproduction of a  $\pi\rho_T$  pair with a large invariant mass and transversity generalized parton distribution*, Phys. Lett. B **688** (2010) 154-167.
- [27] C. Marquet, C. Roiesnel and S. Wallon, *Virtual Compton Scattering off a Spinless Target in AdS/QCD*, JHEP **1004**:051 (2010) 1-26 [arXiv:1002.0566 [hep-ph]].
- [28] D. Colferai, F. Schwennsen, L. Szymanowski and S. Wallon, *Mueller Navelet jets at LHC – complete NLL BFKL calculation*, JHEP **1012**:026 (2010) 1-72 [arXiv:1002.1365 [hep-ph]].
- [29] G. A. Chirilli, L. Szymanowski and S. Wallon, *Uncovering the triple pomeron vertex from Wilson line formalism*, Phys.Rev. D83 (2011) 014020 [arXiv:1010.0285 [hep-ph]].
- [30] I. V. Anikin, A. Besse, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *A phenomenological study of helicity amplitudes of high energy exclusive lepton production of the  $\rho$ -meson*, Phys.Rev. D 84 (2011) 054004 [arXiv:1105.1761 [hep-ph]].
- [31] A. Besse, L. Szymanowski and S. Wallon, *The Dipole Representation of Vector Meson Electroproduction Beyond Leading Twist*, Nucl. Phys. B **867** (2013) 19-60 [arXiv:1204.2281 [hep-ph]].
- [32] T. Altinoluk, B. Pire, L. Szymanowski and S. Wallon, *Resumming soft and collinear contributions in deeply virtual Compton scattering*, JHEP **1210** (2012) 049 [arXiv:1207.4609 [hep-ph]].

- [33] J. L. Abelleira Fernandez *et al.* [LHeC Study Group Collaboration], *A Large Hadron Electron Collider at CERN: Report on the Physics and Design Concepts for Machine and Detector*, J. Phys. G **39** (2012) 075001 [arXiv:1206.2913 [physics.acc-ph]].
- [34] B. Ducloué, L. Szymanowski and S. Wallon, *Confronting Mueller-Navelet jets in NLL BFKL with LHC experiments at 7 TeV*, JHEP **05** (2013) 096 [arXiv:1302.7012 [hep-ph]].
- [35] A. Besse, L. Szymanowski and S. Wallon, *Saturation effects in exclusive  $\rho_{T,L}$  meson electro-production*, JHEP **1311** (2013) 062 [arXiv:1302.1766 [hep-ph]].
- [36] B. Ducloué, L. Szymanowski and S. Wallon, *Evidence for high-energy resummation effects in Mueller-Navelet jets at the LHC*, Phys. Rev. Lett. **112** (2014) 082003 [arXiv:1309.3229 [hep-ph]].
- [37] B. Pire, K. Semenov-Tian-Shansky, L. Szymanowski and S. Wallon, *Crossed channel analysis of quark and gluon generalized parton distributions with helicity flip*, Eur. Phys. J. A **50** (2014) 90 [arXiv:1403.0803 [hep-ph]].
- [38] R. Boussarie, A. Grabovsky, L. Szymanowski and S. Wallon, *Impact factor for high-energy two and three jets diffractive production*, JHEP **09** (2014) 026, [arXiv:1405.7676 [hep-ph]].
- [39] B. Ducloué, L. Szymanowski and S. Wallon, *Violation of energy-momentum conservation in Mueller-Navelet jets production*, Phys. Lett. B **738** (2014) 311-316, [arXiv:1407.6593 [hep-ph]].
- [40] B. Ducloué, L. Szymanowski and S. Wallon, *Evaluating the double parton scattering contribution to Mueller-Navelet jets production at the LHC*, Phys. Rev. D **92** (2015) 7, 076002, arXiv:1507.04735 [hep-ph].
- [41] R. Angeles-Martinez *et al.*, *Transverse Momentum Dependent (TMD) parton distribution functions: status and prospects*, Acta Phys. Polon. B **46** (2015) 12, 2501-2534, arXiv:1507.05267 [hep-ph].
- [42] A. H. Mueller, K. Szymanowski, S. Wallon, B-W. Xiao, F. Yuan, *Sudakov Resummations in Mueller-Navelet Dijet Production*, JHEP **1603** (2016) 096 arXiv:1512.07127 [hep-ph].
- [43] R. Boussarie, A. Grabovsky, L. Szymanowski and S. Wallon, *On the one loop  $\gamma^{(*)} \rightarrow q\bar{q}$  impact factor and the exclusive diffractive cross sections for the production of two or three jets*, JHEP **1611** (2016) 149, arXiv:1606.00419 [hep-ph].
- [44] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Exclusive photoproduction of a  $\gamma\rho$  pair with a large invariant mass*, JHEP **1702** (2017) 054, arXiv:1609.03830 [hep-ph].
- [45] K. Akiba, ..., S. Wallon *et al.*, [LHC Forward Physics Working Group] *LHC Forward Physics: CERN Yellow Report*, J. Phys. G **43** (2016) 110201, arXiv:1611.05079 [hep-ph].

- [46] R. Boussarie, A. Grabovsky, L. Szymanowski and S. Wallon, *Next-to-Leading Order Computation of Exclusive Diffractive Light Vector Meson production in a Saturation Framework*, Phys. Rev. Lett. **119** (2017) 072002, arXiv:1612.08026 [hep-ph].
- [47] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Forward  $J/\psi$  and very backward jet inclusive production at the LHC*, Phys. Rev. D **97** (2018) 1, 014008, arXiv:1709.01380 [hep-ph].
- [48] G. Duplančić, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Probing axial quark generalized parton distributions through exclusive photoproduction of a  $\gamma\pi^\pm$  pair with a large invariant mass*, JHEP **1811** (2018) 179, arXiv:1809.08104 [hep-ph].
- [49] R. Boussarie, A. Grabovsky, L. Szymanowski and S. Wallon, *Towards a complete next-to-logarithmic description of forward exclusive diffractive dijet electroproduction at HERA: real corrections*, Phys. Rev. D **100** (2019) 1, 074020, arXiv:1905.07371 [hep-ph].
- [50] B. Pire, L. Szymanowski and S. Wallon, *Diffractive deeply virtual Compton scattering*, Phys. Rev. D **101** (2020) 7, 074005, Phys. Rev. D **103** (2021) 5, 059901 (erratum), arXiv:1912.10353 [hep-ph].
- [51] R. Boussarie, Y. Hatta, L. Szymanowski and S. Wallon, *Probing the gluon Sivers function with an unpolarized target: GTMD distributions and the Odderons*, Phys. Rev. Lett. **124** (2020) 17, 172501, arXiv:1912.08182 [hep-ph].
- [52] M. Fucilla, A. V. Grabovsky, E. Li, L. Szymanowski and S. Wallon, *NLO computation of diffractive di-hadron production in a saturation framework*, JHEP **03** (2023) 159, arXiv:2211.05774 [hep-ph].
- [53] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Accessing chiral-even quark generalised parton distributions in the exclusive photoproduction of a  $\gamma\pi^\pm$  pair with large invariant mass in both fixed-target and collider experiments*, JHEP **03** (2023) 241, arXiv:2212.00655 [hep-ph].
- [54] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Probing chiral-even and chiral-odd leading twist quark generalized parton distributions through the exclusive photoproduction of a  $\gamma\rho$  pair*, Phys. Rev. D **107** (2023) 9, 094023, arXiv:23922.12026 [hep-ph].
- [55] M. Fucilla, A. V. Grabovsky, E. Li, L. Szymanowski and S. Wallon, *Diffractive single hadron production in a saturation framework at the NLO*, JHEP **02** (2024) 165, arXiv:2310.11066 [hep-ph].
- [56] R. Boussarie, M. Fucilla, L. Szymanowski and S. Wallon, *Exclusive factorization beyond leading twist meets saturation physics*, Phys. Rev. D **111** (2025) 1, 014032, arXiv:2407.18115 [hep-ph].
- [57] R. Boussarie, M. Fucilla, L. Szymanowski and S. Wallon, *Probing gluonic saturation in*

*deeply virtual meson production beyond leading power*, Phys. Rev. Lett. **134** (2025) 4, 041901, arXiv:2407.18203 [hep-ph].

[58] S. Nabeebaccus, J. Schönleber, L. Szymanowski and S. Wallon, *Breakdown of collinear factorization in the exclusive photoproduction of a  $\pi^0\gamma$  pair with large invariant mass*, Phys. Rev. D **111** (2025) 3, 034040, arXiv:2311.09146 [hep-ph].

*Submitted articles:*

[59] S. Nabeebaccus, J. Schönleber, L. Szymanowski and S. Wallon, *Evidence of collinear factorization breaking due to collinear-to-soft Glauber exchanges for a  $2 \rightarrow 3$  exclusive process at leading twist*, arXiv:2409.16067 [hep-ph], submitted to PRL.

## International peer-reviewed conferences and published proceedings:

[c1] S.Wallon, *Unified QCD evolution equations for quarks and gluons*, proceedings of DIS 95, April 1995, Paris, ed J. F. Laporte and Y. Sirois, editions de l'Ecole Polytechnique, 269-271.

[c2] S. Wallon, *QCD dipole predictions for quark singlet, gluon and  $F_L/F_T$  distributions at HERA*, proceedings Moriond 1996, preprint SPhT T96/048, [arXiv:hep-ph/9610332].

[c3] S. Wallon, *The equivalence between the color dipole model and the BFKL Pomeron at leading order*, proceedings of the Madrid workshop on small-x physics, "Madrid 1997, Low x Physics" 37-46 [arXiv:hep-ph/9712509].

[c4] B. Pire, L. Szymanowski et S. Wallon, *Hard Exclusive QCD Processes at the Linear Collider*, International Conference on Linear Colliders, LCWS 04, 19-23 April 2004, Paris, Editions de L'Ecole Polytechnique, vol.I, 335-340 [arXiv:hep-ph/0410108].

[c5] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon,  *$\pi\eta$  Pair Hard Electroproduction and Exotic Hybrid Mesons*, Baryon 2004, 25-29 October 2004, Palaiseau, Nucl. Phys. A **755** (2005) 561-564 [arXiv:hep-ph/0501119].

[c6] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *Hard Electroproduction of Hybrid Mesons*, Symmetries and Spin, 5-10 July 2004, Prague, Czechoslovak Journal of Physics, Vol 55 (2005), A229-A234, suppl. A [arXiv:hep-ph/0608199].

[c7] B. Pire, L. Szymanowski et S. Wallon,  *$\gamma^*\gamma^* \rightarrow \rho\rho$  at very high energy*, Baryon 2004, 25-29 October 2004, Palaiseau, Nucl. Phys. A **755** (2005) 626-629 [arXiv:hep-ph/0501155].

[c8] B. Pire, L. Szymanowski et S. Wallon, *Born order study of  $\gamma^*\gamma^* \rightarrow \rho\rho$  at very high energy*, 11th International Conference on Elastic and Diffractive Scattering: Towards High Energy Frontiers, 15-20 May 2005, Blois, France, LPT 05-64 [arXiv:hep-ph/0509149].

[c9] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *Hard production of exotic hybrid mesons*, 11th International Conference on Elastic and Diffractive Scattering: Towards High Energy Frontiers, 15-20 May 2005, Blois, France, LPT 05-79 [arXiv:hep-ph/0509245].

[c10] I.V. Anikin, B. Pire, L. Szymanowski, O.V. Teryaev et S. Wallon, *Probing the partonic structure of exotic particle in hard electroproduction*, Joint Meeting Heidelberg-Liege-Paris-Rostock, Liege, Belgium, 16-18 décembre 2004, Spa, AIP Conf.Proc.775:51-60 (2005), LPT 05-78 [arXiv:hep-ph/0510030].

[c11] R. Enberg, B. Pire, L. Szymanowski et S. Wallon, *Hard Pomeron in exclusive meson production at ILC*, Photon2005, 31 août-4 September 2005, Warsaw, Acta Phys. Polon. B **37** 847-852 (2006), LPT 05-77 [arXiv:hep-ph/0511144].

[c12] I.V. Anikin, O.V. Teryaev, B. Pire, L. Szymanowski, S. Wallon, *Recent and future experimental evidences for exotic mesons in hard reactions*, ICHEP 06, 26 July - 2 août 2006, Moscou

[arXiv:hep-ph/0610177].

[c13] B. Pire, M. Segond, L. Szymanowski et S. Wallon, *Production of rho0(L) meson pair in  $\gamma^*\gamma^*$  collisions*, Diffraction 2006, 5-10 September 2006, Milos Island, PoS DIFF2006, 034 (2006) [arXiv:hep-ph/0611092].

[c14] M. Segond, L. Szymanowski et S. Wallon, *BFKL resummation effects in exclusive production of rho meson pairs at the ILC*, International Conference on Linear Colliders (LCWS07 and ILC07), Hambourg, 30 May - 3 June 2007, \*Hamburg 2007, LCWS/ILC 2007\* 352-355, arXiv:0709.3252 [hep-ph].

[c15] S. Wallon, *Perturbative QCD in the Regge limit: Prospects at ILC*, 12th International Conference on Elastic and Diffractive Scattering: Forward Physics and QCD, Hamburg, DESY, 21-25 May 2007, Published in \*Hamburg 2007, Blois07, Forward physics and QCD\* 360-370, arXiv:0710.0833 [hep-ph].

[c16] S. Wallon, B. Pire, M. Segond and L. Szymanowski, *Studying QCD factorizations in exclusive  $\gamma^*\gamma^* \rightarrow \rho_L^0\rho_L^0$* , 12th International Conference on Elastic and Diffractive Scattering: Forward Physics and QCD, Hamburg, DESY, 21-25 May 2007, Published in \*Hamburg 2007, Blois07, Forward physics and QCD\* 69-74, arXiv:0710.0838 [hep-ph].

[c17] B. Pire, M. Segond, L. Szymanowski and S. Wallon, *QCD Factorizations in Exclusive  $\gamma^*\gamma^* \rightarrow \rho_L^0\rho_L^0$* , Photon 2007, Paris, 9-13 July 2007, Nucl. Phys. Proc. Suppl. **184**(2008) 224 [arXiv:0710.4413 [hep-ph]].

[c18] M. Segond, L. Szymanowski and S. Wallon, *A test of the BFKL resummation at ILC*, proceedings of the School on QCD, low-x physics, saturation and diffraction, Copanello Calabria, Italy, July 1-14 2007, Acta Phys. Polon. B **39** (2008) 2577 [arXiv:0802.4128 [hep-ph]].

[c19] M. E. Beiyad, B. Pire, L. Szymanowski and S. Wallon, *Two Photon Distribution Amplitudes*, proceedings of the workshop HLPW08, Spa, March 6-8, 2008, AIP conference proceedings serie, AIP Conf. Proc. **1038** (2008) 305 [arXiv:0806.1375 [hep-ph]].

[c20] B. Pire, L. Szymanowski, F. Schwennsen and S. Wallon, *Pomeron-Odderon interference in production of  $\pi^+\pi^-$  pairs in ultraperipheral collisions*, proceedings of Diffraction 2008: International Workshop on Diffraction in High-Energy Physics, La Londe-les-Maures, France, September 9-14, 2008, AIP Conf. Proc. **1105** (2009) 377 [arXiv:0811.0255 [hep-ph]].

[c21] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon,  *$\gamma^* \rightarrow \rho_T$  impact factor with twist three accuracy*, proceedings of Diffraction 2008: International Workshop on Diffraction in High-Energy Physics, La Londe-les-Maures, France, September 9-14, 2008, AIP Conf. Proc. **1105** (2009) 390 [arXiv:0811.2394 [hep-ph]].

[c22] M. E. Beiyad, S. Friot, B. Pire, L. Szymanowski and S. Wallon, *Probing photon structure in DVCS on a photon target*, proceedings of PANIC 08, Eilat, Israel, November 9-14, 2008, arXiv:0901.1792 [hep-ph].



- [c23] I.V. Anikin, D.Yu. Ivanov, B. Pire, L. Szymanowski, S. Wallon, *QCD factorization beyond leading twist in exclusive  $\rho(T)$  meson production*, proceedings of Cracow Epiphany Conference on Hadronic Interactions at the Dawn of the LHC, Cracow, Poland, 5-7 January 2009, Acta Phys. Polon. B **40** (2009) 2131 [arXiv:0904.1482 [hep-ph]].
- [c24] B. Pire, F. Schwennsen, L. Szymanowski and S. Wallon, proceedings of 17th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2009), *Pomeron Odderon interference in production of  $\pi^+ \pi^-$  pairs at LHC*, Madrid, Spain, 26-30 April 2009, arXiv:0906.5512 [hep-ph].
- [c25] B. Pire, F. Schwennsen, L. Szymanowski and S. Wallon, *Looking for the Odderon in photon collisions*, proceedings of Photon 09, DESY, 11-15 May 2009, arXiv:0908.1475 [hep-ph].
- [c26] B. Pire, F. Schwennsen, L. Szymanowski and S. Wallon, *Pomeron Odderon interference in production of two  $\pi^+ \pi^-$  pairs at LHC and ILC*, Proceedings of EPS conference, Krakow, 16-22 July 2009, PoS EPS **-HEP2009** (2009) 339 [arXiv:0909.3450 [hep-ph]].
- [c27] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *QCD factorization beyond leading twist in exclusive processes:  $\rho T$ -meson production*, Proceedings of EPS conference, Krakow, 16-22 July 2009, PoS EPS **-HEP2009** (2009) 070 [arXiv:0909.4038 [hep-ph]].
- [c28] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *Hard diffractive processes and non-perturbative matrix elements beyond leading twist:  $\rho T$ -meson production*, proceedings of the 10th Workshop on non-perturbative QCD, Paris, 8-12 June 2009, arXiv:0909.4042 [hep-ph].
- [c29] S. Wallon, *Hard exclusive processes: theoretical status*, proceedings of Photon 09, DESY, 11-15 May 2009, arXiv:0909.4052 [hep-ph].
- [c30] M. E. Beiyad, B. Pire, M. Segond, L. Szymanowski and S. Wallon, *Transversity Generalized Parton Distributions from  $\gamma N \rightarrow \pi \rho N'$  with a Large  $\pi \rho$  Invariant Mass*, proceedings of the XIII Workshop On High Energy Spin Physics Dubna Spin 2009, arXiv:0911.2611 [hep-ph].
- [c31] M. E. Beiyad, B. Pire, M. Segond, L. Szymanowski and S. Wallon, *Chiral-odd transversity GPDs from a leading twist hard amplitude*, proceedings of 18th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Florence, Italy, 19-23 April 2010, PoS DIS **2010** (2010) 252 [arXiv:1006.0740 [hep-ph]].
- [c32] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *Hard exclusive electroproduction of  $\rho T$  at twist 3*, proceedings of 18th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Florence, Italy, 19-23 April 2010, PoS DIS **2010** (2010) 096 [arXiv:1006.1477 [hep-ph]].
- [c33] D. Colferai, F. Schwennsen, L. Szymanowski and S. Wallon, *A complete NLL BFKL cal-*

*calculation of Mueller Navelet jets at LHC*, proceedings of 18th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Florence, Italie, 19-23 April 2010, PoS DIS **2010** (2010) 095 [arXiv:1006.2810 [hep-ph]].

[c34] M. E. Beiyad, B. Pire, L. Szymanowski and S. Wallon, *Photoproduction of a  $\pi\rho$  Pair and Transversity GPDs*, proceedings of 4th Workshop on Exclusive Reactions at High Momentum Transfer, Newport News, Virginia, 18-21 May 2010, arXiv:1007.2710 [hep-ph].

[c35] D. Colferai, F. Schwennsen, L. Szymanowski and S. Wallon, *First complete NLL BFKL calculation of Mueller Navelet jets at LHC*, proceedings of 35th International Conference on High Energy Physics, (ICHEP 2010), Paris, France, July 22-28, 2010, PoS ICHEP **2010** (2010) 126 [arXiv:1010.0160 [hep-ph]].

[c36] M. E. Beiyad, B. Pire, L. Szymanowski and S. Wallon, *New ways to access the transverse spin content of the nucleon*, proceedings of Spin 2010, 19th International Spin Physics Symposium September 27 - October 2, 2010, Jülich, Germany, J. Phys. Conf. Ser. **295** (2011) 012047 [arXiv:1011.0840 [hep-ph]].

[c37] I. V. Anikin, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *Exclusive electroproduction of  $\rho_T$  meson with twist three accuracy*, proceedings of 35th International Conference on High Energy Physics, (ICHEP 2010), Paris, France, July 22-28, 2010, PoS ICHEP **2010** (2010) 121 [arXiv:1011.1854 [hep-ph]].

[c38] M. E. Beiyad, B. Pire, L. Szymanowski and S. Wallon, *On chiral-odd Generalized Parton Distributions*, proceedings of 35th International Conference on High Energy Physics, (ICHEP 2010), Paris, France, July 22-28, 2010, PoS ICHEP **2010** (2010) 178 [arXiv:1011.3838 [hep-ph]].

[c39] C. Marquet, C. Roiesnel and S. Wallon, *Virtual Compton Scattering off a Spinless Target in the AdS/QCD correspondence*, proceedings of 35th International Conference on High Energy Physics, (ICHEP 2010), Paris, France, July 22-28, 2010, PoS ICHEP **2010** (2010) 476 [arXiv:1012.3332 [hep-ph]].

[c40] I. V. Anikin, A. Besse, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *On high energy exclusive leptoproduction of the rho meson up to twist 3*, proceedings of Europhysics Conference on High Energy Physics-HEP 2011, July 21-27, 2011 Grenoble, Rhone-Alpes, France, PoS EPS **-HEP2011** (2011) 457 [arXiv:1109.5050 [hep-ph]].

[c41] S. Wallon, *A short review of the theory of hard exclusive processes*, proceedings of the workshop "30 years of strong interactions", Spa, Belgium, 6-8 April 2011, Few Body Syst. **53** (2012) 59-80 [arXiv:1109.6187 [hep-ph]].

[c42] D. Colferai, F. Schwennsen, L. Szymanowski and S. Wallon, *The First complete NLL BFKL study of Mueller Navelet jets at LHC*, proceedings of Europhysics Conference on High Energy Physics-HEP 2011, July 21-27, 2011 Grenoble, Rhone-Alpes, France, PoS EPS **-HEP2011** (2011) 338 [arXiv:1110.1250 [hep-ph]].

- [c43] I. V. Anikin, A. Besse, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *High Energy exclusive Leptoproduction of the  $\rho$ -meson: Theory and Phenomenology*, proceedings of 20th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2012), Bonn, Germany, March 26-30, 2012 arXiv:1206.3402 [hep-ph].
- [c44] I. V. Anikin, A. Besse, D. Y. Ivanov, B. Pire, L. Szymanowski and S. Wallon, *Theory and phenomenology of helicity amplitudes for high energy exclusive leptoproduction of the  $\rho$ -meson*, proceedings of 6th International Conference on Quarks and Nuclear Physics (QNP 2012), Palaiseau, France, April 16-20, 2012, PoS QNP **2012** (2012) 056 [arXiv:1207.2503 [hep-ph]].
- [c45] B. Ducloué, L. Szymanowski and S. Wallon, *Mueller-Navelet jets at LHC: the first complete NLL BFKL study*, proceedings of 6th International Conference on Quarks and Nuclear Physics (QNP 2012), Palaiseau, France, April 16-20, 2012, PoS QNP **2012** (2012) 165 [arXiv:1208.6111 [hep-ph]].
- [c46] S. Wallon, *Hard exclusive processes*, proceedings of the International Symposium on Multiparticle Dynamics (ISMD 2012), Kielce, Poland, September 16-21, 2012, Acta Phys. Polon. Supp. 6 (2013) 587-598 [arXiv:1302.2888 [hep-ph]].
- [c47] T. Altinoluk, B. Pire, L. Szymanowski and S. Wallon, *Soft-collinear resummation in deeply virtual Compton scattering*, proceedings of XXI International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2013, 22-26 April 2013, Marseille, France, arXiv:1206.3115 [hep-ph].
- [c48] T. Altinoluk, B. Pire, L. Szymanowski and S. Wallon, *Double logarithms resummation in exclusive processes : the surprising behavior of DVCS*, proceedings of the International Workshop on Low X Physics, May 30 - June 4 2013, Rehovot and Eilat, Israel, arXiv:1309.2508 [hep-ph].
- [c49] A. Besse, L. Szymanowski and S. Wallon, *High energy rho meson leptoproduction*, proceedings of the International Workshop on Low X Physics, May 30 - June 4 2013, Rehovot and Eilat, Israel, arXiv:1309.6332 [hep-ph].
- [c50] A. Besse, L. Szymanowski and S. Wallon, *A model for high energy rho meson leptoproduction based on collinear factorization and dipole models*, proceedings of XXI International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2013, 22-26 April 2013, Marseille, France, arXiv:1309.0616 [hep-ph].
- [c51] B. Ducloué, L. Szymanowski and S. Wallon, *Mueller Navelet jets at LHC: a clean test of QCD resummation effects at high energy?*, proceedings of XXI International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2013, 22-26 April 2013, Marseille, France, arXiv:1309.2672 [hep-ph].
- [c52] B. Ducloué, L. Szymanowski and S. Wallon, *Can one use Mueller-Navelet jets at LHC as a clean test of QCD resummation effects at high energy?*, proceedings of the International Workshop on Low X Physics, May 30 - June 4 2013, Rehovot and Eilat, Israel, arXiv:1312.2624 [hep-ph].

- [c53] H. Abramowicz, J. J. Hollar and S. Wallon, *Small x, Diffraction and Vector Mesons Working Group Summary*, proceedings of XXI International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2013, 22-26 April 2013, Marseille, France, PoS DIS **2013**.
- [c54] A. Besse, L. Szymanowski, S. Wallon, *Phenomenology of the polarized cross-sections of the rho meson leptonproduction at high energy*, proceedings of Photon 2013, Paris, 20-24 May 2013, arXiv:1402.7272 [hep-ph].
- [c55] S. Wallon, *Theory introduction*, proceedings of Photon 2013, Paris, 20-24 May 2013, arXiv:1403.3110 [hep-ph].
- [c56] B. Ducloué, L. Szymanowski, S. Wallon, *Mueller Navelet jets at LHC: an observable to reveal high energy resummation effects?*, proceedings of Photon 2013, Paris, 20-24 May 2013, arXiv:1403.6617 [hep-ph].
- [c57] B. Pire, K. Semenov-Tian-Shansky, L. Szymanowski and S. Wallon, *Toward modelization of quark and gluon transversity generalized parton distributions*, proceedings of XXII International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2014, 28 April - 2 May 2014, Warsaw, Poland, PoS DIS **2014**, arXiv:1407.6119 [hep-ph].
- [c58] B. Ducloué, L. Szymanowski, S. Wallon, *Confronting BFKL dynamics with experimental studies of Mueller-Navelet jets at the LHC*, proceedings of XXII International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2014, 28 April - 2 May 2014, Warsaw, Poland, PoS DIS **2014**, arXiv:1407.5106 [hep-ph].
- [c59] B. Pire, L. Szymanowski and S. Wallon, *On higher twist chiral-odd pion generalized parton distributions*, proceedings of XXII International Workshop on Deep-Inelastic Scattering and Related Subject - DIS 2014, 28 April - 2 May 2014, Warsaw, Poland, PoS DIS **2014**, arXiv:1407.6339 [hep-ph].
- [c60] B. Ducloué, L. Szymanowski and S. Wallon, *High-energy resummation effects in Mueller-Navelet jets production at the LHC*, proceedings of 6th International Workshop on Multiple Partonic Interaction at the LHC (MPI@LHC 2014), 3-7 November 2014, Krakow, Poland, arXiv:1503.03029 [hep-ph].
- [c61] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *Impact factor for high-energy two and three jets diffractive production*, proceedings of Diffraction 2014, September 10-16, 2014, Primošten, Croatia, arXiv:1503.01782 [hep-ph].
- [c62] R. Boussarie, B. Ducloué, L. Szymanowski and S. Wallon, *Production of a forward  $J/\psi$  and a backward jet at the LHC*, proceedings of PHOTON 2015: International Conference on the Structure and the Interactions of the Photon, June 15-19, 2015, Novosibirsk, Russia, arXiv:1511.02181 [hep-ph].
- [c63] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *Diffractive production*

*of jets at high-energy in the QCD shock-wave approach*, proceedings of PHOTON 2015: International Conference on the Structure and the Interactions of the Photon, June 15-19, 2015, Novosibirsk, Russia, arXiv:1511.02785 [hep-ph].

[c64] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *On  $\gamma N \rightarrow \gamma \rho N'$  at large invariant mass*, proceedings of PHOTON 2015: International Conference on the Structure and the Interactions of the Photon, June 15-19, 2015, Novosibirsk, Russia, arXiv:1511.04371 [hep-ph].

[c65] B. Ducloué, L. Szymanowski, S. Wallon, *Mueller-Navelet jets at the LHC*, proceedings of 2015 EDS Blois, Borgo, Corsica, France arXiv:1512.00446 [hep-ph].

[c66] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *Photon dissociation into two and three jets: initial and final state corrections*, proceedings of 2015 EDS Blois, Borgo, Corsica, France arXiv:1512.00774 [hep-ph].

[c67] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Revealing transversity GPDs through the photoproduction of a photon and a  $\rho$  meson*, proceedings of POETIC6, September 7-11, 2015, Palaiseau, France, EPJ Web Conf. 112 (2016) 01006 [arXiv:1602.01774 [hep-ph]].

[c68] B. Ducloué, L. Szymanowski, S. Wallon, *High-energy resummation effects in the production of Mueller-Navelet dijets at the LHC*, proceedings of POETIC6, September 7-11, 2015, Palaiseau, France, EPJ Web Conf. 112 (2016) 02015 [arXiv:1602.01773 [hep-ph]].

[c69] B. Ducloué, L. Szymanowski, S. Wallon, *Double scattering contribution to small- $x$  processes: Mueller-Navelet jets at the LHC*, proceedings of 7th International Workshop on Multiple Partonic Interactions at the LHC (MPI@LHC 2015): Miramare, Trieste, Italy, November 23-27, 2015, [arXiv:1602.01882 [hep-ph]].

[c70] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Photoproduction of a large invariant mass  $\gamma\rho$  pair at small momentum transfer*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2016): Hamburg, Germany, April 11-15, 2016, PoS DIS2016 (2016) 239, [arXiv:1609.05144 [hep-ph]].

[c71] B. Ducloué, L. Szymanowski, S. Wallon, *Probing BFKL dynamics in Mueller-Navelet jet production at the LHC*, proceedings of 24th Low- $x$  Meeting (Low- $x$  2016) Gyongyos, Hungary, June 6-10, 2016, [arXiv:1610.03697 [hep-ph]].

[c72] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *NLO impact factor for diffractive dijet production in the shockwave formalism*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2016): Hamburg, Germany, April 11-15, 2016, PoS DIS2016 (2016) 170.

[c73] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Production of a forward  $J/\psi$  and a backward jet at the LHC*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2016): Hamburg, Germany, April 11-15, 2016, PoS DIS2016 (2016) 204.

[c74] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, Accessing Generalized Parton Distributions in Exclusive Photoproduction of a  $\gamma\rho$  Pair with a Large Invariant Mass, proceedings of 9th International Workshop on Diffraction in High Energy Physics (Diffraction 2016) Santa Tecla di Acireale, Catania, Italy, September 2-8, 2016, [arXiv:1611.08115].

[c75] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *Impact Factor for Exclusive Diffractive Dijet Production with NLO Accuracy*, proceedings of 9th International Workshop on Diffraction in High Energy Physics (Diffraction 2016) Santa Tecla di Acireale, Catania, Italy, September 2-8, 2016, [arXiv:1611.08121].

[c76] R. Boussarie, B. Pire, L. Szymanowski and S. Wallon, *Exploring GPDs through the photoproduction of a  $\gamma\rho$  pair*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2017) University of Birmingham, UK, April 3-7, 2017, PoS DIS2017 (2018) 241, [arXiv:1708.09164].

[c77] R. Boussarie, B. Ducloué, L. Szymanowski and S. Wallon, *QCD resummation effects in forward  $J/\psi$  and very backward jet inclusive production at the LHC*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2017) University of Birmingham, UK, April 3-7, 2017, PoS DIS2017 (2018) 063, [arXiv:1709.02671].

[c78] R. Boussarie, A. V. Grabovsky, D. Yu. Ivanov, L. Szymanowski and S. Wallon, *NLO exclusive diffractive processes with saturation*, proceedings of 24th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2017) University of Birmingham, UK, April 3-7, 2017, PoS DIS2017 (2018) 082, [arXiv:1709.04422].

[c79] G. Duplančić, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Probing Generalized Parton Distributions through the photoproduction of a  $\gamma\pi$  pair*, proceedings of Diffraction and Low-x 2018, 26 August - 1 September 2018, Reggio Calabria, Italy, arXiv:1812.09307 [hep-ph].

[c80] R. Boussarie, A. V. Grabovsky, L. Szymanowski and S. Wallon, *Exclusive diffractive processes including saturation effects at next-to-leading order*, proceedings of Light Cone 2019 (LC 2019), 16-20 September 2019, Ecole Polytechnique, Palaiseau, France, arXiv:1912.12434 [hep-ph].

[c81] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Accessing GPDs through the exclusive photoproduction of a  $\gamma$ -meson pair*, proceedings of 29th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2022), Santiago de Compostela, Spain, 2-6 May 2022, arXiv:2209.05380 [hep-ph].

[c82] M. Fucilla, A. V. Grabovsky, E. Li, L. Szymanowski and S. Wallon, *Diffractive di-hadron production at NLO within the shockwave formalism*, proceedings of Diffraction and Low-x 2022, September 24-30, 2022, Corigliano Calabro, Italy, Acta Phys. Polon. Supp. 16 (2023) 5, 21, arXiv:2211.04390 [hep-ph].

[c83] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wal-

lon, *Accessing GPDs through the exclusive photoproduction of a photon-meson pair with a large invariant mass*, proceedings of Diffraction and Low-x 2022, September 24-30, 2022, Corigliano Calabro, Italy, Acta Phys. Polon. Supp. 16 (2023) 5, 16, arXiv:2212.01034 [hep-ph].

[c84] S. Wallon, *The QCD shockwave approach at NLO: towards precision physics in gluonic saturation*, proceedings of Diffraction and Low-x 2022, September 24-30, 2022, Corigliano Calabro, Italy, Acta Phys. Polon. Supp. 16 (2023) 5, 26, arXiv:2302.04526 [hep-ph].

[c85] M. Fucilla, A. V. Grabovsky, E. Li, L. Szymanowski and S. Wallon, *Diffraction single and di-hadron production at the NLO in a saturation framework*, proceedings of Proceedings of EPS conference 2023, August 20-25, 2023, Universität Hamburg, Germany, PoS EPS-HEP2023 (2024) 201, arXiv:2311.00383 [hep-ph].

[c86] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, J. Schönleber, L. Szymanowski and S. Wallon, *Exclusive photoproduction of a photon-meson pair: A new class of observables to probe GPDs*, proceedings of Proceedings of 25th International Spin Physics Symposium (SPIN 2023) 24-29 September 2023 Durham, NC, USA, arXiv:2401.17656 [hep-ph].

[c87] M. Fucilla, A. V. Grabovsky, E. Li, L. Szymanowski and S. Wallon, *Gluon tomography through diffractive processes in a saturation framework*, proceedings of 31st International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2024) Grenoble, France, April 8-12, 2024, PoS DIS2024 (2025) 090, arXiv:2408.09805 [hep-ph].

[c88] S. Nabeebaccus, J. Schönleber, L. Szymanowski and S. Wallon, *Breakdown of collinear factorisation in the photoproduction of a  $\pi^0\gamma$  pair with large invariant mass*, proceedings of 31st International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2024) Grenoble, France, April 8-12, 2024, PoS DIS2024 (2025) 224, arXiv:2409.20430 [hep-ph].

[c89] G. Duplančić, S. Nabeebaccus, K. Passek-Kumerički, B. Pire, L. Szymanowski and S. Wallon, *Accessing Generalized Parton Distributions through  $2 \rightarrow 3$  exclusive processes*, proceedings of 31st International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2024) Grenoble, France, April 8-12, 2024, PoS DIS2024 (2025) 228, arXiv:2410.03793 [hep-ph].

[c90] S. Nabeebaccus, J. Schönleber, L. Szymanowski and S. Wallon, *Unexpected Breakdown of Collinear Factorisation at Leading Twist in Exclusive  $\pi^0\gamma$  Photoproduction Due to Glauber Pinch*, proceedings of Diffraction and Low-x 2024, Acta Phys.Polon.Supp. 18 (2025) 1, 1-A20.

[c91] R. Boussarie, M. Fucilla, L. Szymanowski and S. Wallon, *Exclusive Leptoproduction of a Light Vector Meson at the Twist-3 in a GTMD Framework*, proceedings of Diffraction and Low-x 2024, Acta Phys.Polon.Supp. 18 (2025) 1, 1-A25, arXiv:2501.08143 [hep-ph].

## Technical reports, experience proposals, summaries and collective works:

- [r1] J. A. Aguilar-Saavedra *et al.* [ECFA/DESY LC Physics Working Group], *TESLA Technical Design Report Part III: Physics at an  $e+e-$  Linear Collider* [arXiv:hep-ph/0106315].
- [r2] J. Roche *et al.*, *Measurements of the electron-helicity dependent cross sections of deeply virtual Compton scattering with CEBAF at 12-GeV*, [arXiv:nucl-ex/0609015].
- [r3] A. Djouadi, J. Lykken, K. Mönig, Y. Okada, M. Oreglia, S. Yamashita, et al, International Linear Collider Reference Design Report Volume 2: PHYSICS AT THE ILC, arXiv:0709.1893 [hep-ph].
- [r4] J. Brau *et al.* [ILC Collaboration], *ILC Reference Design Report Volume 1 - Executive Summary*, arXiv:0712.1950 [physics.acc-ph].
- [r5] T. Behnke *et al.* [ILC Collaboration], *ILC Reference Design Report Volume 4 - Detectors*, arXiv:0712.2356 [physics.ins-det].
- [r6] K. Hafidi *et al.*, *Deeply Virtual Compton Scattering off  $^4\text{He}$* , JLab Proposal to PAC33, 2007.
- [r7] D. Boer *et al.*, *Gluons and the quark sea at high energies: distributions, polarization, tomography*, joint BNL/INT/Jlab program on the science case for an Electron-Ion Collider, September 13 to November 19, 2010, Institute for Nuclear Theory, Seattle, USA, arXiv:1108.1713 [nucl-th].
- [r8] H. Avakian *et al.*, *Hard Exclusive Electroproduction of  $\pi^0$  and  $\eta$  with CLAS12*, PAC38 Update E12-06-108, 2011.
- [r9] H. Avakian *et al.*, *Deeply Virtual Compton Scattering at 11 GeV with transversely polarized target using the CLAS12 Detector*, A 12 GeV Research Proposal to Jefferson Lab PAC (PAC39), 2012.
- [r10] J. L. Abelleira Fernandez, C. Adolphsen, P. Adzic, A. N. Akay, H. Aksakal, J. L. Albacete, B. Allanach and S. Alekhin *et al.*, *A Large Hadron Electron Collider at CERN*, arXiv:1211.4831 [hep-ex].
- [r11] J. L. Abelleira Fernandez *et al.* [LHeC Study Group Collaboration], *On the Relation of the LHeC and the LHC*, arXiv:1211.5102 [hep-ex].
- [r12] Y. Hatta *et al.*, *Probing Nucleons and Nuclei in High Energy Collisions: Dedicated to the Physics of the Electron Ion Collider*, INT program, Seattle (WA), United States, October 1 - November 16, 2018, arXiv:2002.12333 [hep-ph].
- [r13] S. Klein *et al.*, *New opportunities at the photon energy frontier*, Snowmass2021 - Letter of Interest, arXiv:2009.03838 [hep-ph].



- [r14] P. Agostini *et al.* [LHeC Collaboration and FCC-he Study Group], *The Large Hadron-Electron Collider at the HL-LHC*, J. Phys. G 48 (2021) 11, 110501, arXiv:2007.14491 [hep-ex].
- [r15] R. Abdul Khalek *et al.*, *Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report*, Nucl. Phys. A 1026 (2022) 122447, arXiv:2103.05419 [hep-ex].
- [r16] M. Hentschinski *et al.*, *White Paper on Forward Physics, BFKL, Saturation Physics and Diffraction*, Acta Phys.Polon.B 54 (2023) 3, 3-A2, arXiv:2203.08129 [hep-ph].
- [r17] C. Arata *et al.*, *Prospective report of the French QCD community to the ESPPU 2025 with respect to the program of the LHC Run 5 and beyond and future colliders at CERN*, arXiv:2411.11669 [hep-ph].

## Detailed list of oral communications (in chronological order):

see

[http://pperso.th.u-psud.fr/page\\_perso/Wallon/Talks.html](http://pperso.th.u-psud.fr/page_perso/Wallon/Talks.html)

for access to all presentations since 2007.

### Oral presentations at international conferences:

- Colloquium “HERA Physics”, Saclay, 19 May 1994.
- Conférence “DIS-1995”, Paris, 27 April 1995.
- Colloque “HERA Physics”, Cambridge, 10 July 1995.
- XXXIèmes Rencontres de Moriond, QCD et les Interactions Hadroniques à Grande Energie, 27 March 1996.
- Colloque “HERA Physics”, Durham, 20 June 1996.
- Workshop “Nouvelles Méthodes Non-Perturbatives et Quantification sur le Cône de Lumière”, Les Houches, 6 March 1997.
- Workshop “HERA Physics”, Madrid, 19 June 1997.
- Workshop “HERA Physics”, Zeuthen, 6 June 1998.
- Workshop “HERA Physics”, Oxford, 7 July 2000.
- Workshop “Low-x Physics”, Nauplie, 4 June 2003.
- Workshop “Collisionneur Linéaire”, Paris, 21 April 2004.
- Workshop “Low-x Physics”, Prague, 17 September 2004.
- Conference Baryon 04, Palaiseau, 27 October 2004.
- Conference “Elastic and Diffractive Scattering”, Blois, 17 May 2005.
- Conference “Photon 2005”, Warsaw, 3 September 2005.
- Conference “Elastic and Diffractive Scattering”, DESY, Hambourg, 22 May 2007.
- *Invited review talk*, Conference “Elastic and Diffractive Scattering”, DESY, Hambourg, 25 May 2007.
- Conference “Photon 2007”, Paris, 9 July 2007.
- Conference Diffraction 2008: International Workshop on Diffraction in High-Energy Physics, La Londe-les-Maures, France, 10 September 2008.
- *Invited review talk*, Conference “Photon 2009”, DESY, Hambourg, 14 May 2009.
- 10th Symposium “Non-Perturbative Quantum Chromodynamics”, IAP, Paris, 10 June 2009.
- 2 talks, “Europhysics Conference on High Energy Physics”, Cracovie, 17 et 18 July 2009.
- 3 talks at the Conference “DIS 2010”, Florence, 21 et 22 April 2010.
- 3 talks at the Conference “ICHEP 2010”, Paris, 22 July 2010 et 23 July 2010.
- European colloquium of the CLAS 12 Collaboration, Paris, 10 March 2011.
- *Review presentation (invited)*, Workshop “30 years of strong interactions”, Spa, 7 April 2011.
- *2 invited talks*, Working group “Forward Physics”, CERN, 22 June 2011.
- Conference EPS 2011, Grenoble, 23 July 2011.
- International colloquium “Nucleon and nucleus structure studies with a LHC fixed-target experiment and electron-ion colliders”, IPN Orsay, 21 October 2011.
- 2012 Annual CMS Workshop on Forward and small-x QCD physics, 31 January 2012.
- International conference QNP 2012, Ecole Polytechnique, 18 April 2012.

- International colloquium “SPRING 2012 AFTER Meeting”, Grenoble, 11 May 2012.
- *Review presentation (invited)*, International Symposium on Multiparticle Dynamics ISMD 2012, Kielce, Pologne, 20 September 2012.
- *Invited talk*, Workshop “Measuring Multiple Partonic Interactions at the LHC” (MPI@TAU) Tel Aviv, 17 October 2012.
- Conference “DIS-2013”, Marseille, 24 et 26 April 2013 (et “*convener*”).
- *Review presentation (invited)*, Conference “Photon 2013”, Paris, 22 May 2013.
- *Invited talk*, Conference “Low-x 2013”, Eilat, 3 June 2013.
- *Invited talk*, Conference “DVCS: From Observables to GPDs”, Bochum, 12 February 2014.
- Conference “DIS-2014”, Warsaw, 30 April 2014.
- *Invited talk*, Colloquium “REF 2014” (Resummation, Evolution, Factorization), Anvers, 9 December 2014.
- Conference “2015 EDS Blois”, Borgo, France, 30 June 2015 (et *co-organisateur et “convener”*).
- “VI International Conference on the "Physics Opportunities at an Electron-Ion Collider" POETIC VI”, Palaiseau, France, 7 September 2015 (et *co-organisateur et “convener”*).
- *Invited talk*, Kick-off of the "RBI-T-WINNING" project, Ruđer Bošković Institute, Zagreb, Croatie, 4 February 2016.
- *Invited talk*, DIFFRACTION 2016, Acireale, Italie, 6 September 2016.
- *Invited talk*, International workshop “Nucleon and Resonances Structure with Hard Exclusive Processes”, IPNO, Orsay, 29 May 2017.
- Workshop "Getting to Grips with QCD", Paris, 4 April 2018 (et *co-organisateur*).
- *Invited talk*, DIFFRACTION-Low x 2018, Reggio Calabria, Italie, 29 August 2018.
- Workshop "Getting to Grips with QCD", Primošten, 20 September 2018 (et *co-organisateur*).
- *Review presentation (invited)*, International workshop “Towards accuracy at small x”, Higgs Centre for Theoretical Physics, Edimbourg, 12 September 2019.
- 2 contributions at the Conference “LC 2019”, Palaiseau, 16 et 17 September 2019.
- *General Introduction (invited)*, Workshop "Prospects on various aspects of the dilepton probe in hadronic physics", IJCLab, Orsay, 25 November 2021.
- *Review presentation (invited)*, DIFFRACTION-Low x 2022, Corigliano Calabro, Italie, 25 September 2022.
- *Review presentation (invited)*, REVSTRUCTURE, Zagreb, Croatie, 11 July 2023.
- Conférence “DIS-2024”, Grenoble, 9 April 2024.
- *Invited talk*, Conference “DIFFRACTION-Low x 2024”, Trabia, Palerme, Sicily, 10 September 2024.
- *Invited talk*, Conference “REF 2012” (Resummation, Evolution, Factorization), Gif-sur-Yvette, 15 October 2024.

### **Oral presentations at national workshops and laboratory seminars:**

- Rencontres Nationales de Physique des Particules, Montpellier, 13 October 1994.
- Young researchers’ days, Carry-Le Rouet, 12 décembre 1994.
- Thursday courses, Service de Physique des Particules, Saclay, 2 février 1995.
- Seminar of the ” Groupe Conforme”, Saclay, 23 May 1995.
- Thesis Day, Saclay, 1 June 1995.
- Weekly seminar, Saclay, 6 February 1996.
- Thesis Day, Saclay, 14 May 1996.

- SPhT Colloquium, Colleville, Normandie, 25 September 1996.
- Seminar of the “High Energy Theoretical Physics Group”, DESY, 25 November 1996.
- Seminar of the “Hadronic Final State Group”, collaboration H1, DESY, 3 décembre 1996.
- Weekly seminar, Annecy, 28 February 1997.
- Monday seminar, IPN Orsay, 24 March 1997.
- Laboratory’s seminar, LPTPE, Paris, 23 April 1997.
- Laboratory’s seminar, LPTPE, Paris, 26 février 1998.
- Presentation of the laboratories of Paris 6 University, 12 January 1999.
- Leading a working group on small- $x$  physics, LPTPE January-March 1999.
- Series of 2 seminars at l’Ecole Polytechnique and at IPN, 25 January 2001 and 1 February 2001
- Invited seminar at the Congrès de la Société Française de Physique, Strasbourg, 12 July 2001.
- Particle Physics Seminar, SPhT Saclay, 30 March 2005.
- Join seminar IPN-CPhT, Orsay, 16 October 2008.
- Series of lectures at the “GDR Nucléon”, SPhN, Saclay, 8-11 December 2008.
- Particle Physics Seminar, LPT, Orsay, 22 January 2009.
- Meeting of particle physicists, Ecole Polytechnique, Palaiseau, 24 March 2009.
- P2I report “Interaction forte et matière dans les états extrêmes”, IAP, Paris, 4 February 2010.
- Mini colloquium of IPhT Saclay, 16 May 2010.
- Review presentation (invited), assemblée plénière du GDR Nucléon, Saclay, 26 November 2010.
- ANR colloquium, Strasbourg, 24 March 2011.
- General seminar (invited) of IPN, 4 April 2011.
- Seminar (invited) “High Energy Physics”, Dept. of Physics and Astronomy, University College, Londres, 15 April 2011.
- Annual General Meeting du GDR-PH-QCD annual meeting 2012, IPN, Orsay, 7 December 2012.
- Particle Physics Meeting 2013, Grenoble, 16 January 2013.
- LPTHE’s seminar, Paris, 12 April 2013.
- Seminar (invited) IPN-X, Orsay, 30 April 2013.
- Seminar (invited) of SPhN, Saclay, 11 October 2013.
- Newcomers’ Day seminar, LPT, Orsay, 18 October 2013.
- Invited talk, Heavy-Ions Meeting, IPhT, 23 March 2016.
- Invited talk, Colloque de Recherche Inter Ecoles Centrales et CentraleSupélec CRIEC 2016, Centrale Paris, Chatenay-Malabry, 15 June 2016.
- Workshop “Partons and Nuclei” du GDR QCD, IPNO, Orsay, 1er June 2017.
- Particle Physics Meeting, Paris, 11 April 2018.
- Annual General Meeting of the GDR QCD, Palaiseau, 27 November 2018.
- Invited talk “Panorama Théorique”, Exercice de prospective nationale - Séminaire Thématique du GT03 - Physique hadronique, Nantes, 2 March 2020.
- “Café théorie”, IJCLab, Orsay, 19 June 2020.
- Invited talk, CMS seminar, InterUniversity Institute for High Energies, Brussels, Belgium, 12 February 2025.

**Film:** (outreach) “**Les mystères du proton**”, CEA/IRFU et IJCLab

<https://www.youtube.com/watch?v=8iuBwdBxp3M>