

# List of publications

Alberto Accardi

## INVITED PAPERS

1. D. Boer, M. Diehl, R. Milner, R. Venugopalan, W. Vogelsang, D. Kaplan, H. Montgomery, S. Vigdor, A. Accardi, *et al.*, “Gluons and the quark sea at high energies: Distributions, polarization, tomography,” arXiv:1108.1713, to be published jointly by INT Seattle/BNL/JLab [ chapter editor, “QCD matter under extreme conditions”]
2. A. Accardi, S. Lammers, D. Traynor, “QCD and hadronica final states,” JLAB-THY-11-1423, to appear in teh proceedings of at DIS2011, Newport News, VA, Apr 2011 [Summary talk]
3. A. Accardi, F. Arleo, W. K. Brooks, D. D’Enterria and V. Muccifora, “Parton Propagation and Fragmentation in QCD Matter,” **Riv. Nuovo Cim.** **032 (2010) 439** [Invited review paper]

## REGULAR PAPERS

4. L. T. Brady, A. Accardi, T. J. Hobbs, W. Melnitchouk, “Next-to leading order analysis of target mass corrections to structure functions and asymmetries,” arXiv:1108.4734, to be published in **Phys. Rev. D**
5. A. Accardi, W. Melnitchouk, J. F. Owens, M. E. Christy, C. E. Keppel, L. Zhu, J. G. Morfin, “Uncertainties in determining parton distributions at large x,” **Phys. Rev. D** **84 (2011) 014008**
6. A. Accardi, M. E. Christy, C. E. Keppel, P. Monaghan, W. Melnitchouk, J. G. Morfin and J. F. Owens, “New parton distributions from large-x and low- $Q^2$  data,” **Phys. Rev. D** **81 (2010) 034016**
7. A. Accardi, A. Bacchetta, W. Melnitchouk and M. Schlegel, “What can break the Wandzura–Wilczek relation?,” **JHEP** **0911 (2009) 093**
8. A. Accardi, T. Hobbs and W. Melnitchouk, “Hadron mass corrections in semi-inclusive deep inelastic scattering,” **JHEP** **0911 (2009) 084**
9. A. Accardi and W. Melnitchouk, “Target mass corrections for spin-dependent structure functions in collinear factorization,” **Phys. Lett.** **B670 (2008) 114**
10. A. Accardi and J. W. Qiu, “Collinear factorization for deep inelastic scattering structure functions at large Bjorken  $x_B$ ,” **JHEP** **0807 (2008) 090**

11. A. Accardi, “Final state interactions and hadron quenching in cold nuclear matter,” **Phys. Rev. C** **76** (2007) **034902**
12. A. Accardi, “Space-time evolution of hadronization,” **Eur. Phys. J. C** **49** (2007) **347**
13. A. Accardi, “Formation time scaling and hadronization in cold nuclear matter,” **Phys. Lett. B** **649** (2007) **384**
14. A. Accardi, D. Grunewald, V. Muccifora and H. J. Pirner, “Atomic mass dependence of hadron production in deep inelastic scattering on nuclei,” **Nucl. Phys. A** **761** (2005) **67**
15. A. Accardi and M. Gyulassy, “Cronin effect vs. geometrical shadowing in d + Au collisions at RHIC,” **Phys. Lett. B** **586** (2004) **244**
16. A. Accardi, V. Muccifora and H. J. Pirner, “Hadron production in deep inelastic lepton nucleus scattering,” **Nucl. Phys. A** **720** (2003) **131**
17. A. Accardi, “Initial conditions and charged multiplicities in ultra-relativistic heavy-ion collisions,” **Phys.Rev.C** **64** (2001) **064905**
18. A. Accardi and D. Treleani, “Minijet transverse spectrum in high-energy hadron nucleus collisions,” **Phys. Rev. D** **64** (2001) **116004**
19. A. Accardi and D. Treleani, “Hard parton rescatterings and minijets in nuclear collisions at LHC,” **Phys. Rev. D** **63** (2001) **116002**
20. A. Accardi, A. Belli, M. Martellini and M. Zeni, “Topological Yang-Mills cohomology in pure Yang-Mills theory,” **Phys. Lett. B** **431** (1998) **127**
21. A. Accardi and A. Belli, “Renormalization transformations of the 4D BFYM theory,” **Mod. Phys. Lett. A** **12** (1997) **2353**
22. A. Accardi, A. Belli, M. Martellini and M. Zeni, “Cohomology and renormalization of BFYM theory in three dimensions,” **Nucl. Phys. B** **505** (1997) **540**

## REFEREED CONFERENCE AND WORKSHOP PROCEEDINGS

23. A. Accardi, “Hadronization in cold nuclear matter,” **Nucl. Phys. A** **783** (2007) **561** [Proceedings of Hard Probes 2006, Asilomar, CA (USA), Jun 2006].
24. A. Accardi, “Can we distinguish energy loss from hadron absorption?,” **Acta Phys. Hung. A** **27** (2006) **189** [Poster session proceedings of Quark Matter 2005, Budapest (HUN), Aug 2005].
25. A. Accardi, “‘Naked’ Cronin effect in A + A collisions from SPS to RHIC,” **Eur. Phys. J. C** **43** (2005) **121** [Proceedings of Hard Probes 2004, Ericeira (POR), Oct 2004].

26. A. Accardi and M. Gyulassy, “Cronin effect and geometrical shadowing in d + Au collisions: pQCD vs. CGC,” **J. Phys. G** **30** (2004) **S969** [Proceedings of Quark Matter 2004, Oakland, CA (USA), Jan 2004].
27. A. Accardi and M. Gyulassy, “An interpretation of saturation phenomena as Glauber-Gribov multiple parton scatterings,” **Heavy Ion Phys.** **21** (2004) **125** [Proceedings of the *19th Winter Workshop on Nuclear Dynamics*, Breckenridge, CO (USA), Feb 2003].
28. A. Accardi, “Cronin effect in proton nucleus collisions: A survey of theoretical models,” arXiv:hep-ph/0212148 [Contribution to **CERN Yellow Report**, see Ref.36].
29. A. Accardi, N. Armesto and I. P. Lokhtin, “Jet and dijet rates in A B collisions,” arXiv:hep-ph/0211314 [Contribution to **CERN Yellow Report**, see Ref.35].
30. A. Accardi and N. Armesto, “Jet and dijet rates in p A collisions,” arXiv:hep-ph/0211313 [Contribution to **CERN Yellow Report**, see Ref.36].
31. A. Accardi and H. J. Pirner, “Nuclear modifications of fragmentation functions and rescaling models,” **Nucl. Phys. A** **711** (2002) **264** [Proceedings of QCD’N02, Ferrara (Italy), Apr 2002].
32. A. Accardi and D. Treleani, “Minijets in nuclear collisions at the LHC,” **Nucl. Phys. A** **699** (2002) **82** [Proceedings of the *3rd international conference on perspectives in hadron physics*, Trieste (Italy), 7-11 May 2001].

## WHITE PAPERS, WORKING GROUP REPORTS

33. A. Accardi, R. Dupré and K. Hafidi, “Parton propagation and hadronization in cold nuclear matter,” EIC Collaboration Note, Dec 2008.
34. C. Aidala et al. [EIC] with A. Accardi, V. Guzey, T. Lappi, C. Marquet, J. W. Qiu, “Physics Opportunities with e+A Collisions at an Electron Ion Collider”, Apr 2007, available at [http://www.phenix.bnl.gov/~dave/eic/PositionPaper\\_eA.pdf](http://www.phenix.bnl.gov/~dave/eic/PositionPaper_eA.pdf)
35. A. Accardi *et al.*, “Hard probes in heavy ion collisions at the LHC: Jet physics,” working group report for **CERN Yellow Report** on Hard Probes in Heavy Ion Collisions at the LHC, CERN-2004-009, Geneva, 2004 [arXiv:hep-ph/0310274].
36. A. Accardi *et al.*, “Hard probes in heavy ion collisions at the LHC: PDFs, shadowing and p+A collisions,” working group report for **CERN Yellow Report** on Hard Probes in Heavy Ion Collisions at the LHC, CERN-2004-009, Geneva, 2004 [arXiv:hep-ph/0308248].

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37. A. Accardi, V. Guzey, J. Rojo, “Nuclear parton distributions and deviations from DGLAP at an Electron Ion Collider,” arXiv:1106.3839 [Proceedings of DIS2011, Newport News, VA (USA), Apr 2011]
38. A. Accardi, “Subleading effects in QCD global fits,” arXiv:1101.5148 [Proceedings of HiX2010, Jefferson Lab, Newport News, VA (USA), Oct 2010]
39. A. Accardi, “The CTEQ-JLab global analysis of large-x PDFs,” [Proceedings of MENU2010, Willam & Mary U., Williamsburg, VA, May 2010]
40. A. Accardi, “Hadronization in nuclear deep inelastic scattering,” **AIP Conf. Proc. 1189 (2009) 283** [Proceedings of NUINT 2009, Sitges, Barcelona, Spain, 18-22 May 2009].
41. J. F. Owens, E. Christy, W. Melnitchouk, P. Monaghan, A. Accardi, C. E. Keppel and J. G. Morfin, “Global fits for PDFs at large-x,” [Proceedings of NUINT 2009, Sitges, Barcelona, Spain, 18-22 May 2009]. **AIP Conf. Proc. 1189 (2009) 263**
42. A. Accardi, A. Bacchetta and M. Schlegel, “What can we learn from the breaking of the Wandzura-Wilczek relation?,” **AIP Conf. Proc. 1155 (2009) 35** [Proceedings of “Spin structure at long distances”, Jefferson Lab (USA) 12-13 Mar 2009].
43. A. Accardi, “Target mass corrections and beyond,” **AIP Conf. Proc. 1149 (2009) 349** [Proceedings of SPIN 2008, University of Virginia (USA), Oct 2008].
44. A. Accardi, “Space-time evolution of hadronization”, [Proceedings of the “XLIV International Meeting on nuclear physics”, Bormio (ITA), Jan-Feb 2006].
45. A. Accardi, “Cronin effect from backward to forward rapidity: A tale of two mysteries,” **Acta Phys. Hung. A 22 (2005) 289** [Proceedings of BP2004, Budapest (Hungary), Mar 2004].
46. A. Accardi, “Semi-hard scatterings at RHIC and LHC: Initial conditions and charged multiplicities,” hep-ph/0104060, [Proceedings of the *36th Rencontres de Moriond: QCD and Hadronic Interactions*, Les Arcs (France), Mar 2001].
47. A. Accardi, “(Mini)jet production in heavy-ion collisions at LHC,” [proceedings of the *34th Rencontres de Moriond: QCD and Hadronic Interactions*, Les Arcs (France), March 1999].

Newport News, VA, September 9th, 2011

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