

# GUNAR SCHNELL

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## RESEARCH LINE

Experimental and phenomenological investigation of the formation and structure of hadrons.

## RESEARCH EXPERIENCE

since 2011	<b>University of the Basque Country</b> <b>Ikerbasque Research Professor</b> Spokesperson and Editorial Board member of the HERMES experiment at DESY, Member of the Belle Collaboration at KEK, Member of the EIC User Group & Co-Convenor of the CORE@EIC SIDIS working group, Coordinator for pre-shower detector at the A <sub>N</sub> DY experiment at BNL, Member of the “Data-Preservation in HEP” study group at DESY.	<b>Lejona, Vizcaya, PV, Spain</b>
2008-2011	<b>Deutsches Elektronen-Synchrotron (DESY)</b> <b>Scientific Staff.</b> DESY-Zeuthen HERMES-Group Leader, Analysis Coordinator ( <i>head of research</i> ), Deputy Spokesperson, and Editorial Board member of the HERMES experiment at DESY, Member of the “Data-Preservation in HEP” study group at DESY.	<b>Zeuthen, Germany</b>
2005-2008	<b>Universiteit Gent</b> <b>FWO Research Assistant</b> , host: Dirk Ryckbosch. Convener ( <i>project leader</i> ) of the transversity analysis group and Editorial Board member of HERMES.	<b>Gent, Belgium</b>
2003-2005	<b>Tokyo Institute of Technology</b> <b>JSPS / Alexander-von-Humboldt Research Fellow</b> , host: Toshi-Aki Shibata. Convener ( <i>project leader</i> ) of the transversity analysis group and project leader of target-magnet tracking of the HERMES experiment	<b>Tokyo, Japan</b>
2000-2003	<b>Deutsches Elektronen-Synchrotron (DESY)</b> <b>DESY Postdoctoral Research Fellow</b> , advisor: Wolf-Dieter Nowak. Convener of the transversity analysis group of the HERMES experiment, and project leader of the first-level trigger group.	<b>Zeuthen, Germany</b>
1995-1999	<b>New Mexico State University</b> <b>Research Associate</b> , advisors: Stephen F. Pate, Gary S. Kyle, Matthias Burkhardt.	<b>Las Cruces, NM, USA</b>
1994-1995	<b>University of Massachusetts Dartmouth</b> <b>M.S. Student</b> , advisor: Dana S. Fine.	<b>North Dartmouth, MA, USA</b>
1993	<b>BASF AG</b> <b>Internship</b> . Software developer for the Department of Molecular Modeling.	<b>Ludwigshafen, Germany</b>
1992-1993	<b>Friedrich-Schiller Universität Jena</b> <b>Research Assistant</b> , advisor: Gottfried Jetschke.	<b>Jena, Germany</b>

## EDUCATION

1999	<b>New Mexico State University</b> <i>Ph.D.</i> , Department of Physics <i>Longitudinal Polarization of the <math>\Lambda</math> in Deep-Inelastic Scattering of Polarized Positrons from Nucleons</i>	Las Cruces, NM, USA
1995	<b>University of Massachusetts Dartmouth</b> <i>M.S.</i> , Department of Physics	North Dartmouth, MA, USA
1992	<b>Friedrich-Schiller-Universität Jena</b> <i>Vordiplom</i> , Department of Physics	Jena, Germany
1990	<b>Erweiterete Oberschule "Otto Grotewohl"</b> <i>Abitur</i> (high-school qualifying exam for university attendance), "With Distinction"	Schönebeck, East Germany

## FELLOWSHIPS AND AWARDS

- 2010 Visiting Scholar at the University of Washington, Seattle.
- 2005 FWO (Flanders Science Foundation) Six-Year Research Fellowship (only three years used).
- 2003 JSPS/AvH (Japan Society for the Promotion of Science / Alexander von Humboldt Foundation) Two-Year Research Fellowship.
- 1995 Outstanding Teaching Assistant Award (in conjunction with honorable membership of the American Association of Physics Teachers).
- 1993 DAAD (German Academic Exchange Service) Scholarship for Summer School in English at the University of Newcastle upon Tyne.
- 1992 ERASMUS Scholarship for Summer School in Physical and Mathematical Sciences at the University of Crete, Iraklion.
- 1990 Second Prize at "Jugend Musiziert" Sachsen-Anhalt (Germany), Category: Solo Piano.
- 1990 Lessing Medal in Gold (in conjunction with a half-year university scholarship).

## OTHER EXPERIENCES AND ACTIVITIES

- Director of community choir (1994-1995)
- (Co-)Organizer of numerous workshops and conferences, among others of the "Transverse Spin Topical Workshop" (2001) the transverse-spin workshop at Tokyo Institute of Technology (2005), the Flanders Physics Olympics, the International Workshop on "Transverse Partonic Structure of Hadrons" (2009), the EINN Pre-Workshop on "Partonic transverse momentum distributions" (2009), the ECT\* workshop on "Orbital Angular Momentum of Partons in Hadrons" (2009), "QCD-N 2012", the workshop on "Future Physics with HERA Data for Current and Planned Experiments" (2014), "QCD-N 2016", of "Transversity 2014" and "Transversity 2017", 'REF 2017", "REF 2018", "REF 2019", "REF 2020", and "REF 2021", of "Fragmentation Functions 2018", "SPIN 2018", and "QCD-N 2021"; as well as Co-Convenor of the spin session of the "XVII International Workshop on Deep-Inelastic Scattering and Related Subjects" (2009) and of the Nucleon and Nuclear structure and Hadronization session of the "EIC User Group Meeting 2017",
- Grant proposal writing for the Department of Energy, for the Japan Society for the Promotion of Science, the Spanish Ministry, the Science Committee of Armenia, as well as for the EU transnational research frameworks
- Served as member of several Ph.D. and M.S. thesis committees
- Member of the HERMES editorial board and of DPHEP (data preservation in high-energy physics)
- Referee for Nature, Phys. Rev. Lett., C, and D, Phys. Rep., Phys. Lett. B, Nucl. Phys. B, Eur. Phys. J. A and C, Few-Body Systems; Editorial Board member of Heliyon and Associate Editor of Heliyon Physics
- Referee for the AvH Foundation, FWO, FWF, NSC, SNF, and the EU FP7 & H2020 COST and MSC Actions; Foreign Expert in the Polish NSC ST2 Panel "Fundamental constituents of matter"
- Member of the CERN SPS Programme Committee and the CERN "Beamline for Schools" selection committee
- Co-convener and QCD experiment expert of the CERN "Physics Beyond Colliders" study group and co-author of the "Physics Briefing Book: Input for the European Strategy for Particle Physics Update 2020"

## PUBLICATIONS AT A GLANCE<sup>1</sup>

Journal	Number of articles	Impact factor of journal (2020 numbers)
Phys. Rev. Lett.	52 (+1)	9.2
Phys. Rev. D	155 (+7)	5.3
Phys. Rev. C	1 (+1)	3.3
JHEP	25 (+2)	5.8
Phys. Lett. B	26	4.8
Nucl. Phys. B	3	2.8
Eur. Phys. J. A	2	3.0
Eur. Phys. J. C	16	4.6
Eur. Phys. J. D	1	1.4
Prog. Theor. Exp. Phys.	4	2.6
Acta Phys. Pol. B	1	0.7
JINST	1	1.5
Nucl. Instrum. Meth. A	2	1.5
Total	289 (+11)	
Average number of citations	69 (6 top cite 500+, 11 topcite 250+)	
h-index	69	

## MOST RECENT<sup>1</sup>

T. Czank *et al.* [Belle Collaboration], *Search for  $Z' \rightarrow \mu^+\mu^-$  in the  $L_\mu-L_\tau$  gauge-symmetric model at Belle*, submitted to PRD, arXiv:2109.08596 [hep-ex].

L. C. Bland *et al.* [ANDY Collaboration], *Evidence for a QCD accelerator in relativistic heavy-ion collisions*, submitted to PRC,

R. van Tonder *et al.* [Belle Collaboration], *Measurements of  $q^2$  moments of inclusive  $B \rightarrow X_c\ell^+\nu_\ell$  decays with hadronic tagging*, submitted to PRD, arXiv:2109.01685 [hep-ex].

H. Atmacan *et al.* [Belle Collaboration], *Search for  $B^0 \rightarrow \tau^\pm\ell^\mp$  ( $\ell = e, \mu$ ) with a hadronic tagging method at Belle*, submitted to PRD, arXiv:2108.11649 [hep-ex].

K. Inami *et al.* [Belle Collaboration], *An improved search for the electric dipole moment of the  $\tau$  lepton*, submitted to JHEP, arXiv:2108.11543 [hep-ex].

## MOST CITED (at least TOPCITE 500+)<sup>1,2</sup>

A. Accardi *et al.*, *Electron Ion Collider: The Next QCD Frontier*, Eur. Phys. J. A **52**, 268 (2016). [**1069 times cited**]<sup>2</sup>

Z. Q. Liu *et al.* [Belle Collaboration], *Study of  $e^+e^- \rightarrow \pi^+\pi^-J/\psi$  and Observation of a Charged Charmoniumlike State at Belle*, Phys. Rev. Lett. **110**, 252002 (2013). [**745 times cited**]<sup>2</sup>

M. Huschle *et al.* [Belle Collaboration], *Measurement of the branching ratio of  $\bar{B} \rightarrow D^{(*)}\tau^-\bar{\nu}_\tau$  relative to  $\bar{B} \rightarrow D^{(*)}\ell^-\bar{\nu}_\ell$  decays with hadronic tagging at Belle*, Phys. Rev. D **92**, 072014 (2015). [**741 times cited**]<sup>2</sup>

A. Airapetian *et al.* [HERMES Collaboration], *Single-spin asymmetries in semi-inclusive deep-inelastic scattering on a transversely polarized hydrogen target*, Phys. Rev. Lett. **94**, 012002 (2005). [**737 times cited**]<sup>2</sup>

A. Airapetian *et al.* [HERMES Collaboration], *Precise determination of the spin structure function  $g_1$  of the proton, deuteron, and neutron*, Phys. Rev. D **75**, 012007 (2007). [**504 times cited**]<sup>2</sup>

<sup>1</sup>as of 10/2021

<sup>2</sup><http://inspirehep.net>

## REFEREED PUBLICATIONS

- T. Czank *et al.* [Belle Collaboration], *Search for  $Z' \rightarrow \mu^+ \mu^-$  in the  $L_\mu - L_\tau$  gauge-symmetric model at Belle*, submitted to PRD, arXiv:2109.08596 [hep-ex].
- L. C. Bland *et al.* [A<sub>N</sub>DY Collaboration], *Evidence for a QCD accelerator in relativistic heavy-ion collisions*, submitted to PRC,
- R. van Tonder *et al.* [Belle Collaboration], *Measurements of  $q^2$  moments of inclusive  $B \rightarrow X_c \ell^+ \nu_\ell$  decays with hadronic tagging*, submitted to PRD, arXiv:2109.01685 [hep-ex].
- H. Atmacan *et al.* [Belle Collaboration], *Search for  $B^0 \rightarrow \tau^\pm \ell^\mp$  ( $\ell = e, \mu$ ) with a hadronic tagging method at Belle*, submitted to PRD, arXiv:2108.11649 [hep-ex].
- K. Inami *et al.* [Belle Collaboration], *An improved search for the electric dipole moment of the  $\tau$  lepton*, submitted to JHEP, arXiv:2108.11543 [hep-ex].
- S. X. Li *et al.* [Belle Collaboration], *Measurement of the branching fraction of  $\Lambda_c^+ \rightarrow p \omega$  decay at Belle*, submitted to PRD, arXiv:2108.11301 [hep-ex].
- E. Kovalenko *et al.* [Belle Collaboration], *Study of  $e^+ e^- \rightarrow \Upsilon(1S, 2S) \eta$  and  $e^+ e^- \rightarrow \Upsilon(1S) \eta'$  at  $\sqrt{s} = 10.866$  GeV with the Belle detector*, submitted to PRD, arXiv:2108.04426 [hep-ex].
- L. Cao *et al.* [Belle Collaboration], *Measurement of Differential Branching Fractions of Inclusive  $B \rightarrow X_u \ell^+ \nu_\ell$  Decays*, submitted to PRL, arXiv:2107.13855 [hep-ex].
- B. Wang *et al.* [Belle Collaboration], *Measurement of  $\mathcal{B}(B_s \rightarrow D_s X)$  with  $B_s$  Semileptonic Tagging*, submitted to PRD, arXiv:2106.11265 [hep-ex].
- X. L. Wang *et al.* [Belle Collaboration], *The study of  $\gamma\gamma \rightarrow \gamma\psi(2S)$  at Belle*, submitted to JHEP, arXiv:2105.06605 [hep-ex].
- U. Gebauer *et al.* [Belle Collaboration], *Measurement of the branching fractions of the  $B^+ \rightarrow \eta \ell^+ \nu_\ell$  and  $B^+ \rightarrow \eta' \ell^+ \nu_\ell$  decays with signal-side only reconstruction in the full  $q^2$  range*, submitted to PRD, arXiv:2104.13354 [hep-ex].
- L. C. Bland *et al.* [A<sub>N</sub>DY Collaboration], *Observation of Feynman scaling violations and evidence for a new resonance at RHIC*, submitted to PLB, arXiv:1909.03124 [nucl-ex].
- K. Uno *et al.* [Belle Collaboration], *Search for lepton-flavor-violating tau-lepton decays to  $\ell\gamma$  modes at Belle*, JHEP10(2021)019.
- Y. B. Li *et al.* [Belle Collaboration], *Measurements of the Branching Fractions of the Semileptonic Decays  $\Xi_c^0 \rightarrow \Xi^- \ell^+ \nu_\ell$  and the Asymmetry Parameter of  $\Xi_c^0 \rightarrow \Xi^- \pi^+$* , Phys. Rev. Lett. **127**, 121803 (2021).
- L. K. Li *et al.* [Belle Collaboration], *Measurement of branching fractions and search for CP violation in  $D^0 \rightarrow \pi^+ \pi^- \eta$ ,  $D^0 \rightarrow K^+ K^- \eta$ , and  $D^0 \rightarrow \phi \eta$  at Belle*, JHEP09(2021)075.
- Y. Li *et al.* [Belle Collaboration], *Evidence for the decay  $\Omega_c^0 \rightarrow \pi^+ \Omega(2012)^-$   $\rightarrow \pi^+ (\bar{K}\Xi)^-$* , Phys. Rev. D **104**, 052005 (2021).
- J. Yelton *et al.* [Belle Collaboration], *Measurement of the masses and widths of the  $\Sigma_c(2455)^+$  and  $\Sigma_c(2520)^+$  baryons*, Phys. Rev. D **104**, 052003 (2021).

R. Abdul Khalek *et al.*, *Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report*, arXiv:2103.05419 [physics.ins-det].

A. Abdesselam *et al.* [Belle Collaboration], arXiv:1904.02440 [hep-ex].

C. A. Aidala *et al.*, *Probing Nucleons and Nuclei in High Energy Collisions*, arXiv:2002.12333 [hep-ph].

M. G. Echevarria, I. L. Egusquiza, E. Rico and G. Schnell, *Quantum simulation of light-front parton correlators*, Phys. Rev. D **104**, 014512 (2021).

N. K. Nisar *et al.* [Belle Collaboration], *Search for the decay  $B_s^0 \rightarrow \eta'\eta$* , Phys. Rev. D **104**, L031101 (2021).

S. Jia *et al.* [Belle Collaboration], *Search for the  $\eta_{c2}(1D)$  in  $e^+e^- \rightarrow \gamma\eta_{c2}(1D)$  at  $\sqrt{s}$  near 10.6 GeV at Belle*, Phys. Rev. D **104**, 012012 (2021).

L. Cao *et al.* [Belle Collaboration], *Measurements of partial branching fractions of inclusive  $B \rightarrow X_u \ell^+ \nu_\ell$  decays with hadronic tagging*, Phys. Rev. D **104**, 012008 (2021).

S. Dubey *et al.* [Belle Collaboration], *Search for  $B_s^0 \rightarrow \eta' X_{s\bar{s}}$  at Belle using a semi-inclusive method*, Phys. Rev. D **104**, 012007 (2021).

S. Jia *et al.* [Belle Collaboration], *Measurements of branching fractions and asymmetry parameters of  $\Xi_c^0 \rightarrow \Lambda\bar{K}^{*0}$ ,  $\Xi_c^0 \rightarrow \Sigma^0\bar{K}^{*0}$ , and  $\Xi_c^0 \rightarrow \Sigma^+\bar{K}^{*-}$  decays at Belle*, JHEP06(2021)160.

R. Mizuk *et al.* [Belle Collaboration], *Measurement of the energy dependence of the  $e^+e^- \rightarrow B\bar{B}$ ,  $B\bar{B}^*$  and  $B^*\bar{B}^*$  exclusive cross sections*, JHEP06(2021)137.

T. J. Moon *et al.* [Belle Collaboration], *First determination of the spin and parity of the charmed-strange baryon  $\Xi_c(2970)^+$* , Phys. Rev. D **103**, L111101 (2021).

Y. Guan *et al.* [Belle Collaboration], *Measurement of branching fractions and CP asymmetries for  $D_s^+ \rightarrow K^+(\eta, \pi^0)$  and  $D_s^+ \rightarrow \pi^+(\eta, \pi^0)$  decays at Belle*, Phys. Rev. D **103**, 112005 (2021).

J. T. McNeil *et al.* [Belle Collaboration], *Measurement of the resonant and non-resonant branching ratios in  $\Xi_c^0 \rightarrow \Xi^0 K^+ K^-$* , Phys. Rev. D **103**, 112002 (2021).

C. Beleño *et al.* [Belle Collaboration], *Measurement of the branching fraction of the decay  $B^+ \rightarrow \pi^+\pi^-\ell^+\nu_\ell$  in fully reconstructed events at Belle*, Phys. Rev. D **103**, 112001 (2021).

S. Wehle *et al.* [Belle Collaboration], *Test of Lepton-Flavor Universality in  $B \rightarrow K^*\ell^+\ell^-$  Decays at Belle*, Phys. Rev. Lett. **126**, 161801 (2021).

S.-H. Park *et al.* [Belle Collaboration], *Search for the dark photon in  $B^0 \rightarrow A'A'$ ,  $A' \rightarrow e^+e^-$ ,  $\mu^+\mu^-$ , and  $\pi^+\pi^-$  decays at Belle*, JHEP04(2021)191.

S. X. Li *et al.* [Belle Collaboration], *Measurements of the branching fractions of  $\Lambda_c^+ \rightarrow p\eta$  and  $\Lambda_c^+ \rightarrow p\pi^0$  decays at Belle*, Phys. Rev. D **103**, 072004 (2021).

S. Mohanty *et al.* [Belle Collaboration], *Measurement of branching fraction and search for CP violation in  $B \rightarrow \phi\phi K$* , Phys. Rev. D **103**, 052013 (2021).

Y. Teramoto *et al.* [Belle Collaboration], *Evidence for  $X(3872) \rightarrow J/\psi\pi^+\pi^-$  Produced in Single-Tag Two-Photon Interactions*, Phys. Rev. Lett. **126**, 122001 (2021).

J. Y. Lee *et al.* [Belle Collaboration], *Measurement of branching fractions of  $\Lambda_c^+ \rightarrow \eta\Lambda\pi^+$ ,  $\eta\Sigma^0\pi^+$ ,  $\Lambda(1670)\pi^+$ , and  $\eta\Sigma(1385)^+$* , Phys. Rev. D **103**, 052005 (2021).

S. Choudhury *et al.* [Belle Collaboration], *Test of lepton flavor universality and search for lepton flavor violation in  $B \rightarrow K\ell\ell$  decays*, JHEP03(2021)105,

K. H. Kang *et al.* [Belle Collaboration], *Measurement of time-dependent CP violation parameters in  $B^0 \rightarrow K_0^S K_0^S K_0^S$  decays at Belle*, Phys. Rev. D **103**, 032003 (2021).

A. Airapetian *et al.* [HERMES Collaboration], *Azimuthal single- and double-spin asymmetries in semi-inclusive deep-inelastic lepton scattering by transversely polarized protons*, JHEP12(2020)010.

D. Sahoo *et al.* [Belle Collaboration], *Search for lepton-number- and baryon-number-violating tau decays at Belle*, Phys. Rev. D **102**, 111101(R) (2020).

Y. Li *et al.* [Belle Collaboration], *Search for a doubly charged DDK bound state in  $\Upsilon(1S, 2S)$  inclusive decays and via direct production in  $e^+e^-$  collisions at  $\sqrt{s} = 10.520, 10.580$ , and  $10.867$  GeV*, Phys. Rev. D **102**, 112001 (2020).

P. Oskin *et al.* [Belle Collaboration], *Search for transitions from  $\Upsilon(4S)$  and  $\Upsilon(5S)$  to  $\eta_b(1S)$  and  $\eta_b(2S)$  with emission of an  $\omega$  meson*, Phys. Rev. D **102**, 092011 (2020).

J. Yelton *et al.* [Belle Collaboration], *Study of Electromagnetic Decays of Orbitally Excited  $\Xi_c$  Baryons*, Phys. Rev. D **102**, 071103(R) (2020).

M. Nayak *et al.* [Belle Collaboration], *Measurement of the charm-mixing parameter  $y_{CP}$  in  $D^0 \rightarrow K_S^0 \omega$  decays at Belle*, Phys. Rev. D **102**, 071102(R) (2020).

Y. Ku *et al.* [Belle Collaboration], *Search for  $B^0$  decays to invisible final states ( $+ \gamma$ ) at Belle*, Phys. Rev. D **102**, 012003 (2020).

Y. Q. Chen *et al.* [Belle Collaboration], *Dalitz analysis of  $D^0 \rightarrow K^-\pi^+\eta$  decays at Belle*, Phys. Rev. D **102**, 012002 (2020).

R. Seidl *et al.* [Belle Collaboration], *Update of inclusive cross sections of single and pairs of identified light charged hadrons*, Phys. Rev. D **101**, 092004 (2020).

S. Jia *et al.* [Belle Collaboration], *Evidence for a vector charmonium-like state in  $e^+e^- \rightarrow D_s^+ D_{s2}^*(2573)^-$  + c.c.*, Phys. Rev. D **101**, 091101(R) (2020).

K. Chilikin *et al.* [Belle Collaboration], *First search for the  $\eta_{c2}(1D)$  in  $B$  decays at Belle*, JHEP05(2020)034.

G. Caria *et al.* [Belle Collaboration], *Measurement of  $\mathcal{R}(D)$  and  $\mathcal{R}(D^*)$  with a Semileptonic Tagging Method*, Phys. Rev. Lett. **124**, 161803 (2020).

Editor's Suggestion

P. Katreko *et al.* [Belle Collaboration], *Observation of the radiative decays of  $\Upsilon(1S)$  to  $\chi_{c1}$* , Phys. Rev. Lett. **124**, 122001 (2020).

K. Chu *et al.* [Belle Collaboration], *Study of  $B \rightarrow p\bar{p}\pi\pi$* , Phys. Rev. D **101**, 052012 (2020).

M. T. Prim *et al.* [Belle Collaboration], *Search for  $B^+ \rightarrow \mu^+ \nu_\mu$  and  $B^+ \rightarrow \mu^+ N$  with inclusive tagging*, Phys. Rev. D **101**, 032007 (2020).

S. Jia *et al.* [Belle Collaboration], *Observation of a vector charmoniumlike state in  $e^+e^- \rightarrow D_s^+ D_{s1}(2536)^-$  + c.c.*, Phys. Rev. D **100**, 111103(R) (2019).

Y. Li *et al.* [Belle Collaboration], *Measurements of the branching fractions  $\mathcal{B}(B^- \rightarrow \bar{\Lambda}_c^-\Xi_c^{0'})$ ,  $\mathcal{B}(B^- \rightarrow \bar{\Lambda}_c^-\Xi_c(2645)^0)$  and  $\mathcal{B}(B^- \rightarrow \bar{\Lambda}_c^-\Xi_c(2790)^0)$* , Phys. Rev. D **100**, 112010 (2019).

H. Li *et al.* [Belle Collaboration], *Azimuthal asymmetries of back-to-back  $\pi^\pm - (\pi^0, \eta, \pi^\pm)$  pairs in  $e^+e^-$  annihilation*, Phys. Rev. D **100**, 092008 (2019).

R. Mizuk *et al.* [Belle Collaboration], *Observation of a new structure near 10.75 GeV in the energy dependence of the  $e^+e^- \rightarrow \Upsilon(nS)\pi^+\pi^-$  ( $n = 1, 2, 3$ ) cross sections*, JHEP10(2019)220,

P. K. Resmi *et al.* [Belle Collaboration], *First measurement of the CKM angle  $\phi_3$  with  $B^\pm \rightarrow D(K_S^0 \pi^+\pi^-\pi^0)K^\pm$  decays*, JHEP10(2019)178,

Y. Jin *et al.* [Belle Collaboration], *Observation of  $\tau^- \rightarrow \pi^-\nu_\tau e^+e^-$  and search for  $\tau^- \rightarrow \pi^-\nu_\tau \mu^+\mu^-$* , Phys. Rev. D **100**, 071101(R) (2019).

E. Waheed *et al.* [Belle Collaboration], *Measurement of the CKM Matrix Element  $|V_{cb}|$  from  $B^0 \rightarrow D^{*-}\ell^+\nu_\ell$* , Phys. Rev. D **100**, 052007 (2019).

- A. Airapetian *et al.* [HERMES Collaboration], *Beam-helicity asymmetries for single-hadron production in semi-inclusive deep-inelastic scattering from unpolarized hydrogen and deuterium targets*, Phys. Lett. B **797**, 134886 (2019).
- S. Jia *et al.* [Belle Collaboration], *Search for  $\Omega(2012) \rightarrow K\Xi(1530) \rightarrow K\pi\Xi$  at Belle*, Phys. Rev. D **100**, 032006 (2019).
- Y. B. Li *et al.* [Belle Collaboration], *First measurements of absolute branching fractions of the  $\Xi_c^+$  baryon at Belle*, Phys. Rev. D **100**, 031101(R) (2019).
- P.-C. Chou *et al.* [Belle Collaboration], *Search for  $B^0 \rightarrow X(3872)\gamma$* , Phys. Rev. D **100**, 012002 (2019).
- K. Chilikin *et al.* [Belle Collaboration], *Evidence for  $B^+ \rightarrow h_c K^+$  and observation of  $\eta_c(2S) \rightarrow p\bar{p}\pi^+\pi^-$* , Phys. Rev. D **100**, 012001 (2019).
- Y.-T. Lai *et al.* [Belle Collaboration], *Measurement of branching fraction and final-state asymmetry for the  $\bar{B}^0 \rightarrow K_S^0 K^\mp \pi^\pm$  decay*, Phys. Rev. D **100**, 011101(R) (2019).
- R. Seidl *et al.* [Belle Collaboration], *Transverse momentum dependent production cross sections of charged pions, kaons and protons produced in inclusive  $e^+e^-$  annihilation at  $\sqrt{s} = 10.58$  GeV*, Phys. Rev. D **99**, 112006 (2019).
- A. Airapetian *et al.* [HERMES Collaboration], *Longitudinal double-spin asymmetries in semi-inclusive deep-inelastic scattering of electrons and positrons by protons and deuterons*, Phys. Rev. D **99**, 112001 (2019).
- V. Bhardwaj *et al.* [Belle Collaboration], *Search for  $X(3872)$  and  $X(3915)$  decay into  $\chi_{c1}\pi^0$  in  $B$  decays at Belle*, Phys. Rev. D **99**, 111101(R) (2019).
- S. Bastami *et al.*, *Semi-inclusive deep-inelastic scattering in Wandzura-Wilczek-type approximation*, JHEP06(2019)007.
- B. Pal *et al.* [Belle Collaboration], *Evidence for the decay  $B^0 \rightarrow p\bar{p}\pi^0$* , Phys. Rev. D **99**, 091104(R) (2019).
- R. Garg *et al.* [Belle Collaboration], *Search for the  $B \rightarrow Y(4260)K$ ,  $Y(4260) \rightarrow J/\psi\pi^+\pi^-$  decays*, Phys. Rev. D **99**, 071102(R) (2019).
- S. Watanuki *et al.* [Belle Collaboration], *Measurements of isospin asymmetry and difference of direct CP asymmetries in inclusive  $B \rightarrow X_s\gamma$  decays*, Phys. Rev. D **99**, 032012 (2019).
- P.-C. Lu *et al.* [Belle Collaboration], *Observation of  $B^+ \rightarrow p\bar{\Lambda}K^+K^-$  and  $B^+ \rightarrow \bar{p}\Lambda K^+K^+$* , Phys. Rev. D **99**, 032003 (2019).
- A. B. Kaliyar *et al.* [Belle Collaboration], *Measurements of branching fraction and direct CP asymmetry in  $B^\pm \rightarrow K_S^0 K_S^0 K^\pm$  and a search for  $B^\pm \rightarrow K_S^0 K_S^0 \pi^\pm$* , Phys. Rev. D **99**, 031102(R) (2019).
- Y. B. Li *et al.* [Belle Collaboration], *First Measurements of Absolute Branching Fractions of  $\Xi_c^0$  at Belle*, Phys. Rev. Lett. **122**, 082001 (2019).
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## BOOKS AND BOOK CHAPTERS

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D. Boer *et al.*, *Gluons and the quark sea at high energies: distributions, polarization, tomography*, INT-PUB-11-034, BNL-96164-2011, JLAB-THY-11-1373, arXiv:1108.1713 [nucl-th].

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## SEMINARS AND INVITED TALKS

*TMD fragmentation functions in electron-positron annihilation: experimental results*, invited talk at the “Sardinian Workshop on Spin Studies 2021”, Cagliari, Italy (2021).

*Overview of recent HERMES results on transverse-momentum dependent spin asymmetries*, invited talk at “QCD Evolution 2021”, UCLA (2021).

*Pursuing TMD physics at HERMES kinematics*, invited talk at “TMD Studies: from JLab to EIC”, JLab (2021).

*Transverse-momentum distributions from semi-inclusive DIS*, invited talk at “17th International Workshops on Hadron Structure and Spectroscopy”, Trieste (2020) .

*Recent HERMES results on polarized semi-inclusive deep-inelastic scattering*, invited talk at “Correlations in Partonic and Hadronic Interactions”, CERN (2020).

*QCD Conveners Introduction*, invited talk at the “Physics Beyond Collider” Working Group Meeting, CERN (2019).

*Hadron production in electron-positron annihilation*, invited talk at the “Sardinian Workshop on Spin Studies”, Cagliari, Italy (2019).

*Physics Beyond Colliders: fixed-target opportunities for QCD at CERN*, invited talk at IWHSS’19, the “XVI International Workshop on Hadron Structure and Spectroscopy”, Aveiro, Portugal (2019).

*Strong-interaction physics at the existing CERN pre-accelerator complex*, invited talk at the “Open Symposium towards updating the European Strategy for Particle Physics”, Granada, Spain (2019)

*Beam-helicity asymmetries in semi-inclusive deep-inelastic single-hadron production from unpolarized hydrogen and deuterium targets*, invited talk at DIS 2019, the “27th International Workshop on Deep-Inelastic Scattering and Related Subjects”, Torino, Italy (2019).

*Fragmentation in hadron lepto-production*, invited talk at the “Workshop on Novel Probes of the Nucleon Structure in SIDIS,  $e^+e^-$  and  $pp$ ”, Duke University, Durham, NC, USA (2019)

*Transverse-momentum distributions in electro-production and  $e^+e^-$  annihilation*, invited seminar at IFIC, Valencia, Spain (2019)

*QCD Conveners Introduction*, invited talk at the “Physics Beyond Collider” Annual Workshop, CERN (2019).

*Measurements of transverse momentum distributions in semi-inclusive DIS*, invited talk at “Probing Nucleons and Nuclei in High Energy Collisions”, Seattle, USA (2018).

*Transverse-momentum distributions in electro-production and  $e^+e^-$  annihilation*, invited talk at CPHI 2018, the 2018 international conference on “Correlations in Partonic and Hadronic Interactions”, Yerevan, Armenia (2018).

*30 Years of HERMES*, invited talk at SPIN 2018, the “23rd International Spin Symposium”, Ferrara, Italy (2018).

*QCD Overview*, invited talk at the “Physics Beyond Collider” Working Group Meeting, CERN (2018).

*Measurements of light-quark fragmentation in  $e^+e^-$  annihilation*, invited talk at “QCD Evolution 2018”, Santa Fe, NM, USA (2018).

*Belle - Recent results and future plans*, invited talk at “Fragmentation Functions 2018”, Stresa, Italy (2018).

*Flavor separation of quark transverse momentum*, invited talk at the international workshop on “Polarized light-ion physics with an EIC”, Ghent, Belgium (2018).

*Belle: new results on fragmentation and perspectives*, invited talk at “Transversity 2017”, Frascati, Italy (2017).

*Overview of the QCD landscape*, invited talk at the “Physics Beyond Collider” Annual Workshop, CERN (2017).

*Lessons learnt on TMD measurements at HERMES*, invited talk at “Spatial and Momentum Tomography of Hadrons and Nuclei”, INT, Seattle, WA, USA (2017).

*Nucleon and Nuclear Structure and Hadronization*, invited summary talk at “EIC Users Group Meeting 2017”, Trieste, Italy (2017).

*Fragmentation functions and implications for semi-inclusive DIS*, invited talk at “QCD Evolution 2017”, Jefferson Lab, Newport News, VI, USA (2017).

*Finding the AXION tree in the jungle*, seminar at the University of the Basque Country UPV/EHU (2017).

*QCD - Experimental and theoretical context*, invited talk at the “Physics Beyond Collider” Working Group meeting, CERN (2017).

*Studies of TMDs at HERMES*, invited talk at the “3D Parton Distributions: Paths to the LHC” international workshop, Frascati, Italy (2016).

*Overview of TMD results from HERMES*, invited talk at the “22nd International Spin Symposium (Spin’16)”, Champaign, IL, USA (2016).

*Charged-hadron lepto-production off unpolarized protons and deuterons at HERMES*, invited talk at the “22nd International Spin Symposium (Spin’16)”, Champaign, IL, USA (2016).

*TMD Monte Carlo for (polarized) DIS*, invited talk at “Resummation, Evolution, Factorization (REF 2015)”, Hamburg, Germany (2015).

*Exclusive processes at HERMES*, invited talk at “The 10th Circum-Pan-Pacific Symposium on High-Energy Spin Physics”, Taipei, Taiwan (2015).

*Overview of spin angular momentum via TMD measurements in DIS and SIDIS*, invited talk at the ECT\* workshop on “Spin and Orbital Angular Momentum of Quarks and Gluons in the Nucleon”, Trento, Italy (2014).

*Monte Carlo methods for TMD analysis*, invited introductory talk for the round-table discussion at Transversity 2014, Chia, Sardinia, Italy (2014).

*TMD analysis at HERMES using MC*, invited talk at the INT workshop “Studies of 3D Structure of Nucleon”, Seattle, USA (2014).

*DVCS measurements with the HERMES recoil detector*, invited talk at “Deeply Virtual Compton Scattering: From Observables to GPDs”, Bochum, Germany (2014).

*Exploring the multi-dimensional structure of the nucleon*, invited seminar at Stony Brook, USA (2013).

*Semi-inclusive DIS off unpolarized targets*, invited talk at the “Indiana-Illinois Workshop on Fragmentation Functions”, Bloomington, IN, USA (2013).

*Experimental review of transverse spin physics*, invited talk at “International Workshop on Hadron Structure and Spectroscopy 2013 (IWHSS 2013)”, Erlangen, Germany (2013).

*Exploring the Structure of the Nucleon*, invited seminar at Peking University, China (2013).

*Experimental data on TMDs from ep, pp, and e<sup>+</sup>e<sup>-</sup>*, invited talk at the “5th Workshop on Hadron Physics in China and Opportunities in US”, Huangshan, China (2013).

*Experimental data from semi-inclusive DIS measurements*, invited talk at “QCD Evolution 2013”, Newport News, USA (2013).

*Recent highlights on the spin structure of the proton from the HERMES experiment*, invited seminar at Tokyo Institute of Technology, Japan (2013).

*Exploring the Structure of the Nucleon*, invited seminar at Yamagata University, Japan (2013).

*Highlights from the HERMES Collaboration*, invited talk at “Physics Opportunities at an ElecTron Ion Collider (POETIC 2013)”, Valparaso, Chile (2013).

Spin working group summary talk at “Physics at A Fixed Target ExpeRiment (AFTER) using the LHC beams”, Trento, Italy (2013).

*S · (P × P<sub>h</sub>)*, invited plenary talk at “Physics at A Fixed Target ExpeRiment (AFTER) using the LHC beams”, Trento, Italy (2013).

*Highlights from the HERMES Collaboration*, invited plenary talk at “The 20th International Spin Physics Symposium (SPIN2012)”, Dubna, Russia (2012).

*The spin-momentum structure of the nucleon*, invited talk at the HERA Symposium “1992-2012: 20 years of DIS at HERA”, Hamburg, Germany (2012).

*Experimental overview of TMDs based on semi-inclusive DIS observables*, invited talk at the Eleventh Conference on the Intersections of Particle and Nuclear Physics (CIPANP 2012), St. Petersburg, FL, USA (2012).

*What semi-inclusive DIS has taught us about TMDs*, invited talk at INT 12-49W Workshop on Orbital Angular Momentum in QCD, Seattle, USA (2012).

*The quark structure of the nucleon*, invited talk at the 2012 workshop “Exploring QCD frontiers: from RHIC and LHC to EIC”, Stellenbosch, South Africa (2012).

*On the way to a 3-dimensional picture of the nucleon – Latest results on GPDs from COMPASS, HERMES, and JLab*, invited talk at the Ringberg workshop on New Trends in HERA Physics 2011, Ringberg Castle, Germany (2011).

*Recent results on generalized parton distributions from the COMPASS, HERMES, and Jefferson Lab’s Hall A and CLAS Collaborations*, Nucl. Phys. Suppl. **222-224**, 187 (2012).

*TMDs in semi-inclusive DIS off unpolarized targets*, invited talk at Transversity 2011 – Third International Workshop on Transverse Polarization Phenomena in Hard Scattering, Veli Lošinj, Croatia (2011).

*What semi-inclusive DIS has taught us about TMDs*, invited talk at Opportunities for Drell-Yan Physics at RHIC, Upton, USA (2011).

*Transversity and its chiral-odd/-even friends*, invited talk at Transverse Spin Phenomena and Their Impact on QCD – a Workshop in Honor of Gary Goldstein’s 70th Birthday, Newport News, USA (2010).

*Experimental results on transversity and TMDs*, invited talk at the ECT\* workshop on Hard Meson and Photon Production (GPD 2010), Trento, Italy (2010).

*Review on TMD results from semi-inclusive DIS*, invited talk at the INT 10-3 Workshop on Gluons and the Quark Sea at High Energies: Distributions, Polarization, Tomography, Seattle, USA (2010).

*Inclusive and semi-inclusive hadron production in lepton scattering*, invited talk at the INT 10-3 Workshop on Gluons and the Quark Sea at High Energies: Distributions, Polarization, Tomography, Seattle, USA (2010).

*Selected spin-physics results from fixed-target experiments*, invited talk at the INT 10-3 Workshop on Gluons and the Quark Sea at High Energies: Distributions, Polarization, Tomography, Seattle, USA (2010).

*The structure of the nucleon*, invited talk at the BNL/RBRC Summer Program on Nucleon Spin, Upton, USA (2010).

*Experimental Signatures of TMDs*, invited talk at the ECT\* Workshop on Transverse Momentum Distributions (TMD 2010), Trento, Italy (2010).

*The HERMES view on the nucleon’s TMD partonic structure*, invited talk at LightCone 2010, Valencia, Spain (2010); PoS **LC2010** (2010) 052.

*The puzzling spin of the proton*, Seminar at the University of the Basque Country, Leioa, Spain (2010).

*Partonic transverse-momentum distributions*, Summary talk at the 8th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, Milos, Greece (2009).

*From solving the spin crisis to 3-D pictures of the nucleon*, Seminar at the HERA end-of-data-taking 2nd anniversary symposium, Hamburg, Germany (2009).

*New insights into the nucleon structure through azimuthal asymmetries in DIS*, Seminar at the European Graduate School of Complex Systems of Hadrons and Nuclei, Justus-Liebig Universität Giessen, Germany (2009).

*Recent Highlights from the HERMES Collaboration*, invited talk at the International Workshop on Hadron Structure and Spectroscopy, Mainz, Germany (2009).

*Recent Highlights from the HERMES Collaboration*, invited talk at the International Workshop on Recent Topics in Hadron Physics, Tokyo, Japan (2009).

*Selected HERMES Results on the Quark Structure of the Nucleon*, Seminar at the Universiteit Gent, Belgium (2009).

*Recent Highlights from the HERMES Collaboration*, invited talk at the CLAS12 European Workshop, Genova, Italy (2009).

*HERMES Results on the Quark Structure of Nucleons*, Seminar at the Graduiertenkolleg at the University of Freiburg, Germany (2008).

*gmc\_trans – a Monte Carlo generator for transverse-momentum-dependent distribution and fragmentation functions*, invited talk at the PKU-RBRC Workshop on Transverse Spin Physics, Beijing, China (2008).

*Transversity and beyond*, invited talk at the 2nd Workshop on Transverse Polarization Phenomena in Hard Processes (Transversity'08), Ferrara, Italy (2008).

*Recent HERMES Results on the Quark Structure of Nucleons*, invited talk at the Spring Meeting of the Japanese Physical Society, Osaka, Japan (2008).

*Semi-Inclusive DIS with Transverse Momentum*, invited talk at the International Workshop on Orbital Motion and Spin of Partons inside the Nucleon, Tokyo Institute of Technology, Tokyo, Japan (2008).

*Transversity and its chiral-/T-odd friends*, JLAB physics seminar, Newport News, VA, USA (2008).

*Transverse Spin Physics at HERMES*, invited talk at the 6th Circum-Pan-Pacific Symposium on High Energy Spin Physics, Vancouver, Canada (2007).

*Transversity and its chiral-odd/T-odd friends*, invited talk at the HERMES End-of-Data-Taking Symposium, Hamburg, Germany (2007).

*gmc\_trans – a Monte Carlo generator for transverse-momentum-dependent distribution and fragmentation functions*, invited talk at the Workshop on Transverse momentum, spin, and position distributions of partons in hadrons, ECT\*, Trento, Italy (2007).

*T-odd Phenomena in Semi-Inclusive Deep-Inelastic Scattering*, Nuclear Physics Seminar Series, Andrzej Soltan Institute for Nuclear Studies / University of Warsaw, Warsaw, Poland (2007).

*Spin in Hadron Physics*, invited talk at the Workshop on Spin in Hadron Physics, Tokyo Institute of Technology, Tokyo, Japan (2006).

*Transverse Spin and Momentum at HERMES*, invited talk at the 2nd Workshop on the QCD Structure of the Nucleon (QCD-N'06), Rome, Italy (2006).

*Transversity at HERMES*, invited talk at the 4th International Conference on Quarks and Nuclear Physics (QNP06), Madrid, Spain (2006).

*Dr. Collins and Mr. Sivers – A (politically not always correct) hommage to two T-odd effects*, NMSU Physics Department Seminar Series, New Mexico State University, Las Cruces, NM (2006).

*HERMES – Physics Overview*, invited talk at the Workshop on Spin and Parton Structure of the Nucleon (quark transversity and orbital motions), Tokyo Institute of Technology, Tokyo, Japan (2005).

*Transversity*, invited talk at the 6th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, Milos, Greece (2005).

*Transverse Spin Physics Program at HERMES*, invited talk at the 5th Circum-Pan-Pacific Symposium On High Energy Spin Physics (Pacific Spin '05), Tokyo, Japan (2005).

*Single-Spin Asymmetries at HERMES – Probing the Transverse Spin and Momentum of Quarks in the Nucleon*, Seminar über Teilchen- und Hadronenphysik, Universität Bonn, Germany (2005).

*Single-Spin Asymmetries in Semi-Inclusive DIS at HERMES*, invited talk at the workshop on Semi-Inclusive Reactions (SIR2005), Jefferson Laboratory, Newport News, VA (2005).

*Single-Spin Asymmetries at HERMES – Probing Transverse Spin and Momentum Degrees of Freedom in the Nucleon*, RHIC Spin Seminar, Brookhaven National Laboratory, Upton, NY (2005).

*Single-Spin Asymmetries at HERMES – Probing Transverse Spin and Momentum Degrees of Freedom in the Nucleon*, Kanto Hadron Seminar, Tokyo Institute of Technology, Tokyo, Japan (2005).

*Single-Spin Asymmetries at HERMES – Probing Transverse Spin and Momentum Degrees of Freedom in the Nucleon*, Department of Physics Seminar, Kyoto University, Kyoto, Japan (2005).

*Transverse Spin and Momentum in the Proton and Single-Spin Asymmetries at HERMES*, NMSU Physics Department Seminar Series, New Mexico State University, Las Cruces, NM (2004).

*Transverse Spin and Momentum in the Proton and Single-Spin Asymmetries at HERMES*, Argonne Medium Energy Physics Seminar, Argonne National Laboratory, Argonne, IL (2004).

*The Transversity Distribution of the Proton as Measured at HERMES*, invited talk at the Gordon Research Conference on Photo-Nuclear Reactions, Tilton, NH (2004).

*Semi-Inclusive Deep-Inelastic Scattering at HERMES – Probing the Spin Structure of the Nucleon*, Nuclear Physics Seminar Series, Andrzej Soltan Institute for Nuclear Studies, Warsaw, Poland (2004).

*GDH, Duality and Other Connections Between Seemingly Different Things*, RIKEN Spin Seminar Series, RIKEN, Wakoh, Japan (2003).

*Study of New Quark Distributions at HERMES*, invited talk at the Fall Meeting of the Japanese Physical Society, Miyazaki, Japan (2003).

*Longitudinal Polarization of the  $\Lambda$  in DIS*, BDKR Physics Festival in honor of W. Kern, University of Massachusetts Dartmouth, North Dartmouth, MA (1999).

*What can one learn from  $\Lambda$  production in DIS*, QCD Seminar Series, New Mexico State University, Las Cruces, NM (1998).

## CONFERENCE CONTRIBUTIONS AND NON-REFEREED PUBLICATIONS

G. Schnell (On Behalf of the HERMES Collaboration), *Azimuthal single- and double-spin asymmetries in semi-inclusive deep-inelastic lepton scattering by transversely polarized protons*, contributed talk at SPIN 2021, the “24th International Spin Symposium”, Japan (2021).

G. Schnell (On Behalf of the Belle Collaboration), *Fragmentation function measurements from Belle*, contributed talk at SPIN 2021, the “24th International Spin Symposium”, Japan (2021).

G. Schnell (On Behalf of the HERMES Collaboration), *Azimuthal single- and double-spin asymmetries in semi-inclusive deep-inelastic lepton scattering by transversely polarized protons*, contributed talk at SMuK 2021, the “2021 virtual DPG-Tagung (DPG Meeting) of the Matter and Cosmos Section (SMuK)”, Germany (2021).

G. Schnell (On Behalf of the Belle Collaboration), *Inclusive production of two hadrons in electron-positron annihilation at Belle*, contributed talk at SMuK 2021, the “2021 virtual DPG-Tagung (DPG Meeting) of the Matter and Cosmos Section (SMuK)”, Germany (2021).

G. Schnell (On Behalf of the HERMES Collaboration), *Azimuthal single- and double-spin asymmetries in semi-inclusive deep-inelastic lepton scattering by transversely polarized protons*, contributed talk at vConfXIV 2021, the “Virtual Tribute to Quark Confinement and the Hadron Spectrum 2021”, Stavanger, Norway (2021).

G. Schnell (On Behalf of the HERMES Collaboration), *Overview of recent HERMES results on transverse-momentum-dependent spin asymmetries in semi-inclusive DIS*, contributed talk at HADRON 2021, the “19th International Workshop on Hadron Structure and Spectroscopy”, Mexico City, Mexico (2021).

G. Schnell (On Behalf of the HERMES Collaboration), *Overview of recent HERMES results on transverse-momentum-dependent spin asymmetries in semi-inclusive DIS*, contributed talk at MESON 2021, the “16th International Workshop on Meson Physics”, Cracow, Poland (2021).

C. A. Aidala *et al.*, *Probing Nucleons and Nuclei in High Energy Collisions*, arXiv:2002.12333 [hep-ph].

R. Alemany *et al.*, *Summary Report of Physics Beyond Colliders at CERN*, arXiv:1902.00260 [hep-ex].

A. Dainese *et al.*, *Physics Beyond Colliders: QCD Working Group Report*, arXiv:1901.04482 [hep-ex].

S. Bastami et al., *Applications of the WW-type approximation to SIDIS*, PoS(DIS2019)211.

G. Schnell (On Behalf of the HERMES Collaboration), *Beam-helicity asymmetries in semi-inclusive deep-inelastic single-hadron production from unpolarized hydrogen and deuterium targets*, PoS(DIS2019)203.

G. Schnell (On Behalf of the HERMES Collaboration), *Longitudinal double-spin asymmetries in semi-inclusive deep-inelastic scattering of electrons and positrons by protons and deuterons*, PoS(DIS2019)202.

G. Schnell (On Behalf of the Belle Collaboration), *Fragmentation functions from  $e^+e^-$  annihilation at Belle*, contributed talk at the “XI CPAN Days”, Oviedo, Spain (2019).

G. Schnell (On Behalf of the HERMES Collaboration), *Longitudinal double-spin asymmetries in semi-inclusive deep-inelastic scattering of electrons and positrons by protons and deuterons*, contributed talk at DIS 2019, the “27th International Workshop on Deep-Inelastic Scattering and Related Subjects”, Torino, Italy (2019).

G. Schnell (On Behalf of the HERMES Collaboration), *Exclusive meson production at HERMES*, contributed talk at SPIN 2018, the “23rd International Spin Symposium”, Ferrara, Italy (2018).

G. Schnell, *Measurements of fragmentation functions and implications for semi-inclusive deep-inelastic scattering*, PoS(QCDEV2017)049.

G. Schnell, *Lessons learnt at HERMES on technical aspects of TMD measurements – the devil is in the detail*, contributed talk at “Spatial and Momentum Tomography of Hadrons and Nuclei”, INT, Seattle, WA, USA (2017).

G. Schnell, *Tuning (model) parameters to data not corrected for acceptance*, contributed talk at “Spatial and Momentum Tomography of Hadrons and Nuclei”, INT, Seattle, WA, USA (2017).

S. Wang and G. Schnell (On Behalf of the HERMES Collaboration),  *$\Theta^+$  Search at HERMES with Deuterium and Hydrogen Targets*, JPS Conf. Proc. 10, 032007 (2016).

M. Radici, A. Bacchetta, A. Signori, and G. Schnell, *Exploring the Flavor Dependence of Partonic Transverse Momentum*, Int. J. Mod. Phys. Conf. Ser. **37**, 1560024 (2015).

G. Schnell, *Monte Carlo methods for TMD analyses*, EPJ Web Conf. 85, 02024 (2015).

A. Rostomyan, G. Schnell [for the HERMES Collaboration], *Transverse target single-spin asymmetry (SSA) in inclusive electroproduction of charged pions and kaons*, Contributed talk at “21st International Symposium on Spin Physics (SPIN2014)”, Beijing, China (2014).

G. Schnell, *Experimental data on transverse-momentum distributions from semi-inclusive deep-inelastic scattering*, Int. J. Mod. Phys. Conf. Ser. **25**, 1460013 (2014).

W.-D. Nowak, A. Rostomyan, G. Schnell, and C. Van Hulse [For the HERMES Collaboration], *Recent Results from HERMES*, Proceedings of “XV Advanced Research Workshop on High Energy Spin Physics (DSPIN-13)”, ISBN 978-5-9530-0377-3, p. 255-262 (2014).

G. Schnell, *Experimental overview of TMDs based on semi-inclusive DIS observables*, AIP Conf. Proc. **1560**, 511 (2013).

G. Schnell [HERMES Collaboration], *Overview of recent results from the HERMES experiment*, Phys. Part. Nucl. **44**, no. 6, 954 (2013).

R. Seidl *et al.* [Belle Collaboration], *Spin dependent fragmentation functions at Belle*, Nuovo Cim. C **036**, no. 05, 177 (2013).

A. Accardi, J. L. Albacete, M. Anselmino, N. Armesto, E. C. Aschenauer, A. Bacchetta, D. Boer and W. Brooks *et al.*, *Electron Ion Collider: The Next QCD Frontier - Understanding the glue that binds us all*, arXiv:1212.1701 [nucl-ex].

I. Adachi *et al.* [Belle Collaboration], *Study of Three-Body  $\Upsilon(10860)$  Decays*, arXiv:1209.6450 [hep-ex].

I. Adachi *et al.* [Belle Collaboration], *Measurement of  $B^- \rightarrow \tau^- \bar{\nu}_\tau$  with a Hadronic Tagging Method Using the Full Data Sample of Belle*, arXiv:1208.4678 [hep-ex].

G. Schnell, *Recent results on generalized parton distributions from the COMPASS, HERMES, and Jefferson Lab’s Hall A and CLAS Collaborations*, Nucl. Phys. B (Proc. Suppl.) **222** (2012) 187.

Z. Akopov *et al.* [DPHEP Study Group], *Status Report of the DPHEP Study Group: Towards a Global Effort for Sustainable Data Preservation in High Energy Physics*, arXiv:1205.4667 [hep-ex].

G. Schnell [For the HERMES Collaboration], *The Sivers and other semi-inclusive single-spin asymmetries at HERMES*, XVIII International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2010), Firenze, Italy (2010); PoS **DIS2010** (2010) 247.

T. Brooks *et al.* [DPHEP Study Group], *Data Preservation in High Energy Physics*, arXiv:0912.0255 [hep-ex].

G. Schnell [For the HERMES Collaboration], *TMDs in Single-Spin Asymmetries at HERMES*, International Workshop on Transverse Partonic Structure of Hadrons, Yerevan, Armenia (2009).

G. Schnell [For the HERMES Collaboration], *Single Transverse-Spin Asymmetries in DIS off Transversely Polarized Protons*, The Eighteenth Particles and Nuclei International Conference (PANIC 08), Eilat, Israel (2008).

G. Schnell [For the HERMES Collaboration], *gmc\_trans – a Monte Carlo generator for transverse-momentum-dependent distribution and fragmentation functions*, open session of the HERMES Transversity Meeting , Ferrara, Italy (2007).

G. Schnell [For the HERMES Collaboration], *Probes of Orbital Angular Momentum at HERMES*, Joint UNM/RBRC Workshop on Parton Orbital Angular Momentum, Albuquerque, NM (2006)

G. Schnell [For the HERMES Collaboration], *Single-Spin Asymmetries in One-Hadron Production at HERMES*, International Workshop on Transverse Polarisation Phenomena in Hard Processes (Transversity 2005), Como, Italy (2005).

G. Schnell [For the HERMES Collaboration], *Subleading-Twist Effects in Single-Spin Asymmetries in Semi-Inclusive DIS on a Longitudinally Polarized Hydrogen Target*, Spring Meeting of the Japanese Physical Society, Noda City, Japan (2005).

G. Schnell [For the HERMES Collaboration], *Azimuthal Single-Spin Asymmetries on a Transversely Polarized Hydrogen Target at HERMES*, 16th International Spin Physics Symposium (SPIN04), Trieste, Italy (2004).

G. Schnell [For the HERMES Collaboration], *An overview of the recent results on hyperon production at HERMES*, 16th International Spin Physics Symposium (SPIN04), Trieste, Italy (2004).

U. Elschenbroich, G. Schnell and R. Seidl [HERMES Collaboration], *Transverse spin physics at HERMES*, arXiv:hep-ex/0405017.

G. Schnell [For the HERMES Collaboration], *Azimuthal Single-Spin Asymmetries on a Transversely Polarized Hydrogen Target at HERMES*, Spring Meeting of the Japanese Physical Society, Fukuoka, Japan (2004).

G. Schnell [For the HERMES Collaboration], *Transversity Measurements at HERMES*, The 4th Circum-Pan-Pacific Symposium On High Energy Spin Physics (Pacific Spin '03), Seattle, WA (2003).

G. Schnell [For the HERMES Collaboration], *Status and Prospects of the Semi-Inclusive Transverse Target Single-Spin Asymmetries at HERMES*, 11th International Workshop on Deep-Inelastic Scattering (DIS03), St. Petersburg, Russia (2003).

G. Schnell [For the HERMES Collaboration], *Measuring transversity at the HERMES experiment*, DESY-HERMES-03-47 (Prepared for 11th International Workshop on Deep Inelastic Scattering (DIS 2003), St. Petersburg, Russia, 23-27 April 2003).

G. Schnell [For the HERMES Collaboration], *Status and Prospects of the Transverse Target Run at HERMES*, ESOP Topical Workshop on Single-Spin Asymmetries, Amsterdam, The Netherlands (2002).

G. Schnell [For the HERMES Collaboration], *Probing Quark Distributions in Semi-Inclusive Single-Spin Asymmetries*, Lightcone 2002, Los Alamos, NM (2002).

G. Schnell [For the HERMES Collaboration], *Transversity and Lambda Physics at HERMES*, The 3rd Circum-Pan-Pacific Symposium On High Energy Spin Physics (Pacific Spin '01), Beijing, China (2001).

J. Blümlein, W. D. Nowak and G. Schnell, *Transverse spin physics. Proceedings, Topical Workshop, Zeuthen, Germany, July 9-11, 2001. (Transparencies only)*, DESY-ZEUTHEN-01-01 (Prepared for Topical Workshop on Transverse Spin Physics, Zeuthen, Germany, 9-11 Jul 2001).

G. Schnell [For the HERMES Collaboration], *Longitudinal Polarization of the  $\Lambda^0$  hyperon in DIS*, Fall Meeting of the Division of Nuclear Physics of the APS (DNP98), Santa Fe, NM (1998).

G. Schnell, *Longitudinal Lambda Polarization in DIS*, APS 4-Corners Section Mtg., Albuquerque, NM (1998).