

CURRICULUM VITAE: TILMAN PLEHN

Personal Information

Address Institut für Theoretische Physik
 Philosophenweg 16
 69120 Heidelberg
 Germany
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Date of birth May 28, 1969 in Siegen, Germany

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Education and Positions

since 12/08 Professor (chair) at Heidelberg University

10/07–11/08 Reader at the University of Edinburgh

01/06–09/07 Heisenberg Fellow & Lecturer at the University of Edinburgh

11/04–12/05 Heisenberg Fellow at the Max Planck Institute for Physics, Munich

11/02–10/04 Fellow at the CERN Theory Group

10/98–9/02 Research Associate/Assistant Scientist at the University of Wisconsin, Madison
8/02 Department of Physics Chair's Award
 for *Excellence in Undergraduate Physics Teaching*

1/02–5/02 and

6/01–8/01 and

6/00–8/00 Visiting Assistant Professor/Lecturer at the University of Wisconsin, Madison

7/98–9/98 Fellow at the DESY Theory Group

6/95–7/98 Ph D student at the DESY Theory Group
 Production of Supersymmetric Particles at High Energy Colliders
 supervisor: Peter Zerwas

4/92–5/95 Student at the Hamburg University (Diplom)

10/93–5/95 Diploma thesis at the DESY Theory Group
 Pair Production of Higgs Bosons in Hadron Collisions
 supervisor: Peter Zerwas

10/91–4/95 Scholarship of the Studienstiftung des Deutschen Volkes

4/91–2/92 Student at the ETH Zürich

10/89–2/91 Student at the Heidelberg University (Vordiplom)

7/88–9/89 Military service

6/88 Abitur: Werner–Heisenberg–Gymnasium, Neuwied

Professional experience

since 2019	Chair <i>Department for Physics and Astronomy</i>
2017-2019	Deputy chair <i>Department for Physics and Astronomy</i>
since 2014	Co-spokesperson of DFG research training group GRK1940 <i>Particle Physics Beyond the Standard Model</i>
since 2010	Managing Board, International Max Planck Research School <i>Precision Tests of Fundamental Symmetries</i>
since 2009	Scientific Board, <i>Groupement de Recherche Terascale</i>
2013-2017	Managing Board of Excellence Project <i>Heidelberg Graduate School for Fundamental Physics</i>

Teaching: regular curriculum

Heidelberg (all lectures 4 hours/week)

4/19–7/19	<i>Theoretical Physics II</i>
10/18–2/19	<i>Theoretical Physics I</i>
4/18–7/18	<i>The Standard Model of Particle Physics</i> with H-C Schultz–Coulon <i>Electromagnetism and Quantum Mechanics for Teachers</i> with E Thommes
10/17–2/18	<i>QCD</i> with J Pawlowski
4/17–7/17	<i>The Standard Model of Particle Physics</i> with S Hansmann-Menzemer <i>Electromagnetism and Quantum Mechanics for Teachers</i> with S Westhoff
10/16–2/17	<i>Dark Matter</i> with T Marrodan, M Bauer, M Dunford, F Queiroz
4/16–7/16	<i>Advanced Cosmology</i> with B Schäfer (sabbatical)
10/15–2/16	<i>Dark Matter</i> with T Marrodan
4/15–7/15	<i>Theoretical Physics II</i>
10/14–2/15	<i>Theoretical Physics I</i>
4/14–7/14	<i>QCD</i> with J Pawlowski
10/13–2/14	<i>Higgs Physics</i> with H-C Schultz–Coulon
4/13–7/13	<i>QCD and LHC Simulations</i>
10/12–2/13	<i>Higgs Physics</i>
4/12–7/12	<i>Quantum Field Theory II</i>
10/11–2/12	<i>Quantum Field Theory I</i>
4/11–7/11	<i>The Standard Model of Particle Physics</i> with U Uwer
10/10–2/11	<i>LHC Physics</i>
4/10–7/10	<i>Theoretical Physics II</i>
10/09–2/10	<i>Theoretical Physics I</i>
4/09–7/09	<i>LHC Physics</i>

Edinburgh

1/07–3/07	and
9/06–12/06	and
1/06–3/06	<i>Foundations of Mathematical Physics</i> (Edinburgh)

Madison

1/02–5/02	and
6/01–8/01	and
6/00–8/00	<i>Physics in the Arts</i> (<i>Physics 109</i>)

Research Advising and Junior Collaborators

Emma Geoffray	PhD Heidelberg (expected 2022)
Michel Luchmann	master& PhD Heidelberg (expected 2022)
Marco Bellagente	PhD Heidelberg (expected 2022)
Peter Reimitz	master & PhD Heidelberg (expected 2020)
Ramon Winterhalder	PhD Heidelberg (expected 2020)
Anke Biekötter	PhD Heidelberg (2019)
Sascha Diefenbacher	master Heidelberg (2019)
Rhea Moutafis	master Heidelberg (2019)
Elias Bernreuther	master Heidelberg (2018)
Josua Göcking	master Heidelberg (2017)
Anja Butter	master & PhD Heidelberg (2017)
Johann Brehmer	master & PhD Heidelberg (2017)
Torben Schell	master & PhD Heidelberg (2017)
Valentin Tenorth	master Heidelberg (2017)
Martin Klassen	master Heidelberg (2017)
Jamil Hetzel	PhD Heidelberg (2015)
Peter Schichtel	diploma & PhD Heidelberg (2014)
Malte Buschmann	master Heidelberg (2014)
Karin Firnkes	master Heidelberg (2014)
Ioan Wigmore	PhD Edinburgh (2013)
Daniel Wiegand	master Heidelberg (2013)
Felix Kling	master Heidelberg (2012)
Dorival Goncalves	PhD Heidelberg (2012)
Fabian Gross	diploma Heidelberg (2011)
Erik Gerwick	PhD Edinburgh (2011)
Thomas Lübbert	diploma Heidelberg (2010)
Sebastian Bock	diploma Heidelberg (2010)
Ben O'Leary	PhD Edinburgh (co-supervisor M Krämer)
Michael Spannowsky	PhD Munich (supervisor H Fritzsche)
Michael Rauch	PhD Munich (supervisor W Hollik/M Drees)
Alexandre Alves	Sao Paulo (supervisor O Eboli)
Dan Hooper	PhD Madison (supervisor F Halzen)
Tianjun Li	PhD Madison (supervisor V Barger)
Jing Jiang	PhD Madison (supervisor T Han)

PUBLICATIONS IN JOURNALS

- 1 *Light Dark Matter Annihilation and Scattering in LHC Detectors*
with M Bauer, P Foldenauer, and P Reimitz
arXiv:2005.13551 [hep-ph]
- 2 *Per-Object Systematics using Deep-Learned Calibration*
with G Kasieczka, M Luchmann, and F Otterpohl
arXiv:2003.11099 [hep-ph]
- 3 *How to GAN Event Subtraction*
with A Butter and R Winterhalder
arXiv:1912.08824 [hep-ph]
- 4 *How to GAN away Detector Effects*
with M Bellagente, A Butter, G Kasieczka, and R Winterhalder
SciPost Phys 8 (2020) 4
- 5 *Hadronic Footprint of GeV-Mass Dark Matter*
with P Reimitz and P Richardson
arXiv:1911.11147 [hep-ph]
- 6 *O new physics, where art thou? A global search in the top sector*
with I Brivio, S Bruggisser, F Maltoni, R Moutafis, E Vryonidou, S Westhoff, and C Zhang
JHEP 02 (2020) 131
- 7 *Benchmarking simplified template cross sections in WH production*
with J Brehmer, S Dawson, S Homiller, and F Kling
JHEP 1911 (2019) 034
- 8 *How to GAN LHC Events*
with A Butter and R Winterhalder
SciPost Phys 7 (2019) 075
- 9 *CapsNets Continuing the Convolutional Quest*
with S Diefenbacher, H Frost, G Kasieczka, and J Thompson
SciPost Phys 8 (2020) 023
- 10 *Multi-scale Mining of Kinematic Distributions with Wavelets*
with B Lillard, A Romero, and T Tait
SciPost Phys 8 (2020) 3 043
- 11 *Deep-Learning Jets with Uncertainties and More*
with S Bollweg, M Haußmann, G Kasieczka, M Luchmann, and J Thompson
SciPost Phys 8 (2020) 1 006
- 12 *The Machine Learning Landscape of Top Taggers*
with G Kasieczka et al.
SciPost Phys 7 (2019) 014
- 13 *Quark-Gluon Tagging: Machine Learning vs Detector*
with G Kasieczka, N Kiefer, and J Thompson
SciPost Phys 6 (2019) 069
- 14 *The Gauge-Higgs Legacy of the LHC Run II*
with A Biekötter and T Corbett
SciPost Phys 6 (2019) 064

- 15 *The global Higgs picture at 27 TeV*
with A Biekötter, D Goncalves, M Takeuchi, and D Zerwas
SciPost Phys 6 (2019) 024
- 16 *QCD or What?*
with T Heimel, G Kasieczka, and J Thompson
SciPost Phys 6 (2019) 030
- 17 *Higgs Physics: It ain't over till it's over*
with S Dawson and C Englert
Phys Rept 816 (2019) 1
- 18 *Actual Physics behind Mono-X*
with E Bernreuther, J Horak, and A Butter
SciPost Phys 5 (2018) 034
- 19 *Dark Matter in Anomaly-Free Gauge Extensions*
with M Bauer, S Diefenbacher, M Russell, and D Camargo
SciPost Phys 5 (2018) 036
- 20 *Higgs boson pair production at future hadron colliders: From kinematics to dynamics*
with D Goncalves, T Han, F Kling, and M Takeuchi
Phys Rev D97 (2018) 113004
- 21 *Dark Matter from Electroweak Single Top Production*
with J Thompson and S Westhoff
Phys Rev D98 (2018) 015012
- 22 *Tagging Jets in Invisible Higgs Searches*
with A Biekötter, F Keilbach, R Moutafis, and J Thompson
SciPost Phys 4 (2018) 035
- 23 *Better Higgs-CP Tests Through Information Geometry*
with J Brehmer, F Kling, and T Tait
Phys Rev D97 (2018) 095017
- 24 *Probing Baryogenesis through the Higgs Self-Coupling*
with M Reichert, A Eichhorn, H Gies, J Pawlowski, and M Scherer
Phys Rev D97 (2018) 075008
- 25 *Deep-learned Top Tagging using Lorentz Invariance and Nothing Else*
with A Butter, G Kasieczka, and M Russell
SciPost Phys 5 (2018) 028
- 26 *Higgs factories: Higgsstrahlung versus W-fusion*
with R Lafaye, M Rauch, and D Zerwas
Phys Rev D96 (2017) 075044
- 27 *Weak boson fusion at 100 TeV*
with D Goncalves and J Thompson
Phys Rev D95 (2017) 095011
- 28 *Deep-learning Top Taggers or The End of QCD?*
with G Kasieczka, M Russell, and T Schell
JHEP 1705 (2017) 006

- 29 *Saving the MSSM from the Galactic Center Excess*
with A Butter, S Murgia, T Plehn, and T Tait
Phys Rev D96 (2017) 035036
- 30 *Better Higgs Measurements Through Information Geometry*
with J Brehmer, K Cranmer, and F Kling
Phys Rev D95 (2017) 073002
- 31 *On the Validity of Dark Matter Effective Theory*
with M Bauer, A Butter, N Desai, and J Gonzalez-Fraile
Phys Rev D95 (2017) 075036
- 32 *Assault on the Nastiest Effective Operator at the LHC*
with F Krauss and S Kuttimalai
Phys Rev D95 (2017) 035024
- 33 *Matching Matters!*
with A Freitas and D Lopez-Val
Phys Rev D94 (2016) 095007
- 34 *Mad-Maximized Higgs Pair Analyses*
with F Kling and P Schichtel
Phys Rev D95 (2017) 035026
- 35 *Learning from the New Higgs-like Scalar before It Vanishes*
with M Bauer, A Butter, J Gonzalez-Fraile, and M Rauch
Phys Rev D95 (2017) 055011
- 36 *The Gauge-Higgs Legacy of the LHC Run I*
with A Butter, O Eboli, J Gonzalez-Fraile, and M C Gonzalez-Garcia
JHEP 1607 (2016) 152
- 37 *Hunting the Flavon*
with M Bauer and T Schell
Phys Rev D94 (2016) 056003
- 38 *Pushing Higgs Effective Theory over the Edge*
with A Biekötter and J Brehmer
Phys Rev D94 (2016) 055032
- 39 *Towards the Final Word on Neutralino Dark Matter*
with J Bramante, N Desai, P Fox, A Martin, and B Ostdiek
Phys Rev D93 (2016) 063525
- 40 *Pushing Higgs Effective Theory to its Limits*
with J Brehmer, A Freitas, and D Lopez-Val
Phys Rev D93 (2016) 075014
- 41 *Measuring the Top Yukawa Coupling at 100 TeV*
with M Mangano, P Reimitz, T Schell, and H Shao
J Phys G43 (2016) 035001
- 42 *Invisible Higgs Decays to Hooperons in the NMSSM*
with A Butter, M Rauch, D Zerwas, S Henrot-Versille, and R Lafaye
Phys Rev D93 (2016) 015011

- 43 *The Higgs Legacy of the LHC Run I*
with T Corbett, O Eboli, D Goncalves, J Gonzalez-Fraile, and M Rauch
JHEP 1508 (2015) 156
- 44 *Resonance Searches with an Updated Top Tagger*
with G Kasieczka, T Schell, T Strebler, and G Salam
JHEP 1506 (2015) 203
- 45 *The Higgs Mass and the Scale of New Physics*
with A Eichhorn, H Gies, J Jäckel, M Scherer, and R Sundheimer
JHEP 1504 (2015) 022
- 46 *Relic neutralino surface at a 100 TeV collider*
with J Bramante, P Fox, A Martin, B Ostdiek, T Schell, and M Takeuchi
Phys Rev D91 (2015) 054015
- 47 *Spying an invisible Higgs*
with C Bernaciak, P Schichtel, and J Tattersall
Phys Rev D91 (2015) 035024
- 48 *Mass Effects in the Higgs-Gluon Coupling: Boosted vs Off-Shell Production*
with M Buschmann, D Goncalves, S Kuttimalai, M Schönherr, and F Krauss
JHEP 1502 (2015) 038
- 49 *Squark and gluino production cross sections in pp collisions at s=13,14,33 and 100 TeV*
with C Borschensky, M Krämer, A Kulesza, M Mangano, S Padhi, and X Portell
Eur Phys J C74 (2014) 3174
- 50 *Automated third generation squark production to next-to-leading order*
with D Goncalves, D Lopez-Val, and K Mawatari
Phys Rev D90 (2014) 075007
- 51 *Resolving the Higgs-Gluon Coupling with Jets*
with M Buschmann, C Englert, D Goncalves, and M Spannowsky
Phys Rev D90 (2014) 013010
- 52 *Polarized WW Scattering on the Higgs Pole*
with J Brehmer and J Jäckel
Phys Rev D90 (2014) 054023
- 53 *Precision Measurements of Higgs Couplings: Implications for New Physics Scales*
with C Englert, A Freitas, M Mühlleitner, M Rauch, M Spira, and K Walz
J Phys G41 (2014) 113001
- 54 *Stop on Top*
with M Buckley and M Ramsey-Musolf
Phys Rev D90 (2014) 014046
- 55 *A Novel Approach to Higgs Coupling Measurements*
with K Cranmer, S Kreiss, and D Lopez-Val
Phys Rev D91 (2015) 054032
- 56 *Benchmarking an Even Better HEPTopTagger*
with C Anders, C Bernaciak, G Kasieczka, and T Schell
Phys Rev D89 (2014) 074047

- 57 *Improving Higgs plus Jets analyses through Fox–Wolfram Moments*
with C Bernaciak, B Mellado, X Ruan, and P Schichtel
Phys Rev D89 (2014) 053006
- 58 *MadMax, or Where Boosted Significances Come From*
with P Schichtel and D Wiegand
Phys Rev D89 (2014) 054002
- 59 *Buckets of Higgs and Tops*
with M Buckley, T Schell, and M Takeuchi
JHEP 1402 (2014) 130
- 60 *Constraining Supersymmetry using the Relic Density and the Higgs Boson*
with S Henrot-Versille, R Lafaye, M Rauch, D Zerwas, S Plaszczynski, B Rouille d’Orfeuil,
and M Spinelli
Phys Rev D89 (2014) 055017
- 61 *Measuring Extended Higgs Sectors as a Consistent Free Couplings Model*
with D Lopez-Val and M Rauch
JHEP 1310 (2013) 134
- 62 *Looking for leptogluons*
with D Goncalves, D Lopez-Val, K Mawatari, and I Wigmore
Phys Rev D87 (2013) 094023
- 63 *Buckets of Tops*
with M Buckley and M Takeuchi
JHEP 1308 (2013) 086
- 64 *Measuring Higgs Couplings at a Linear Collider*
with M Klute, R Lafaye, M Rauch, and D Zerwas
Europhys Lett 101 (2013) 51001
- 65 *Fox-Wolfram Moments in Higgs Physics*
with C Bernaciak, M Buschmann, and A Butter
Phys Rev D87 (2013) 073014
- 66 *Higgs Quantum Numbers in Weak Boson Fusion*
with C Englert, D Goncalves, and K Mawatari
JHEP 1301 (2013) 148
- 67 *Automated Squark and Gluino Production to Next-to-Leading Order*
with D Goncalves, D Lopez-Val, K Mawatari, and I Wigmore
Phys Rev D87 (2013) 014002
- 68 *Scaling Patterns for QCD Jets*
with E Gerwick, S Schumann, and P Schichtel
JHEP 1210 (2012) 162
- 69 *Higgs Couplings after the Discovery*
with M Rauch
Europhys Lett 100 (2012) 11002
- 70 *Tagging Single Tops*
with F Kling and M Takeuchi
Phys Rev D86 (2012) 094029

- 71 *Measuring Higgs Couplings from LHC Data*
with M Klute, R Lafaye, M Rauch, and D Zerwas
Phys Rev Lett 109 (2012) 101801
- 72 *Stop Searches in 2012*
with M Spannowsky and M Takeuchi
JHEP 1208 (2012) 091
- 73 *Sgluon Pair Production to Next-to-Leading Order*
with D Goncalves, D Lopez-Val, K Mawatari, and I Wigmore
Phys Rev D85 (2012) 114024
- 74 *Top Tagging*
with M Spannowsky
J Phys G39 (2012) 083001
- 75 *LHC: Standard Higgs and Hidden Higgs*
with C Englert, M Rauch, D Zerwas, and P Zerwas
Phys Lett B707 (2012) 512
- 76 *How to Improve Top Tagging*
with M Spannowsky and M Takeuchi
Phys Rev D85 (2012) 034029
- 77 *Travels on the squark-gluino mass plane*
with J Jäckel, V V Khoze, and P Richardson
Phys Rev D85 (2012) 015015
- 78 *Establishing Jet Scaling Patterns with a Photon*
with C Englert, P Schichtel, and S Schumann
JHEP 1202 (2012) 030
- 79 *Understanding Jet Scaling and Jet Vetos in Higgs Searches*
with E Gerwick and S Schumann
Phys Rev Lett 108 (2012) 032003
- 80 *Automized Squark-Neutralino Production to Next-to-Leading Order*
with T Binoth, D Goncalves, D Lopez-Val, K Mawatari, and I Wigmore
Phys Rev D84 (2011) 075005
- 81 *Exploring the Higgs portal*
with C Englert, D Zerwas, and P Zerwas
Phys Lett B703 (2011) 298
- 82 *W+Jets at CDF: Evidence for Top Quarks*
with M Takeuchi
J Phys G38 (2011) 095006
- 83 *Jets plus Missing Energy with an Autofocus*
with C Englert, P Schichtel, and S Schumann
Phys Rev D83 (2011) 095009
- 84 *Boosted Semileptonic Tops in Stop Decays*
with M Spannowsky and M Takeuchi
JHEP 1105 (2011) 135

- 85 *Asymptotic safety and Kaluza-Klein gravitons at the LHC*
with E Gerwick and D Litim
Phys Rev D83 (2011) 084048
- 86 *Measuring Supersymmetry with Heavy Scalars*
with E Turlay, R Lafaye, M Rauch, and D Zerwas
J Phys G38 (2011) 035003
- 87 *Measuring Hidden Higgs and Strongly-Interacting Higgs Scenarios*
with S Bock, R Lafaye, M Rauch, D Zerwas, and P Zerwas
Phys Lett B694 (2010) 44
- 88 *Measuring Unification*
with C Adam, J Kneur, R Lafaye, M Rauch, and D Zerwas
Eur Phys J C71 (2011) 1520
- 89 *Stop Reconstruction with Tagged Tops*
with M Spannowsky, M Takeuchi and D Zerwas
JHEP 1010 (2010) 078
- 90 *Charged Higgs Boson Production in Association with a Top Quark in MC@NLO*
with C Weydert et al.
Eur Phys J C67 (2010) 617
- 91 *New Physics at the LHC*
with D Morrissey and T Tait
Phys Rept 515 (2012) 1
- 92 *Fat Jets for a Light Higgs*
with G Salam and M Spannowsky
Phys Rev Lett 104 (2010) 111801
- 93 *Understanding Single Tops using Jets*
with M Rauch and M Spannowsky
Phys Rev D80 (2009) 114027
- 94 *Measuring the Higgs Sector*
with R Lafaye, M Rauch, D Zerwas, and M Dührssen
JHEP 0908 (2009) 009
- 95 *Seeking Sgluons*
with T Tait
J Phys G36 (2009) 075001
- 96 *Supersymmetric Higgs Bosons in Weak Boson Fusion*
with W Hollik, M Rauch and H Rzehak
Phys Rev Lett 102 (2009) 091802
- 97 *Neutralino Dark Matter and Trilepton Searches in the MSSM*
with D Hooper and A Vallinotto
Phys Rev D77 (2008) 095014
- 98 *Measuring Supersymmetry*
with R Lafaye, M Rauch, D Zerwas
Eur Phys J C54 (2008) 617

- 99 *Signatures of Gravitational Fixed Points at the LHC*
with D Litim
Phys Rev Lett 100 (2008) 131301
- 100 *Charged-Higgs Collider Signals with or without Flavor*
with S Dittmaier, G Hiller and M Spannowsky
Phys Rev D77 (2008) 115001
- 101 *Four Generations and Higgs Physics*
with G Kribs, M Spannowsky and T Tait
Phys Rev D76 (2007) 075016
- 102 *MadGraph/MadEvent v4: The new web generation*
with J Alwall et al.
JHEP 09 (2007) 028
- 103 *Same-Sign Charginos and Majorana Neutralinos at the LHC*
with J Alwall and D Rainwater
Phys Rev D76 (2007) 055006
- 104 *It's a Gluino!*
with A Alves and O Eboli
Phys Rev D74 (2006) 095010
- 105 *Supersymmetry Simulations with Off-Shell Effects for LHC and ILC*
with K Hagiwara, W Kilian, F Krauss, T Ohl, D Rainwater, J Reuter, S Schumann
Phys Rev D73 (2006) 054002
- 106 *Weak Boson Fusion Production of Supersymmetric Particles at LHC*
with G C Cho, K Hagiwara, J Kanzaki, D Rainwater und T Stelzer
Phys Rev D73 (2006) 055005
- 107 *Supersymmetry Parameter Analysis: SPA Convention and Project*
with J A Aguilar-Saavedra et al.
Eur Phys J C46 (2006) 43
- 108 *Squark and Gluino Production with Jets*
with D Rainwater and P Skands
Phys Lett B645 (2007) 217
- 109 *The Quartic Higgs Coupling at Hadron Colliders*
with M Rauch
Phys Rev D72 (2005) 053008
- 110 *Dark Matter and Collider Phenomenology with Two Light Supersymmetric Higgs Bosons*
with D Hooper
Phys Rev D72 (2005) 115005
- 111 *Charged Higgs Boson Pairs at the LHC*
with A Alves
Phys Rev D71 (2005) 115014
- 112 *Physics Interplay of the LHC and the ILC*
with G Weiglein et al.
Phys Rept 426 (2006) 47

- 113 *Pair Production of Scalar Leptoquarks at the LHC*
with M Krämer, M Spira and P Zerwas
Phys Rev D71 (2005) 057503
- 114 *Graviton Collider Effects in One and More Large Extra Dimensions*
with G Giudice and A Strumia
Nucl Phys B706 (2005) 455
- 115 *Split Supersymmetry at Colliders*
with W Kilian, P Richardson and E Schmidt
Eur Phys J C39 (2005) 229
- 116 *Associated Production of a Top Quark and a Charged Higgs Boson*
with E Berger, T Han and J Jiang
Phys Rev D71 (2005) 115012
- 117 *Probing the Higgs Self-Coupling at Hadron Colliders Using Rare Decays*
with U Baur and D Rainwater
Phys Rev D69 (2004) 053004
- 118 *Robust LHC Higgs Search in Weak Boson Fusion*
with A Alves, O Eboli and D Rainwater
Phys Rev D69 (2004) 075005
- 119 *Higgs-Boson Production Induced by Bottom Quark*
with E Boos
Phys Rev D69 (2004) 094005
- 120 *Examining the Higgs Boson Potential at Lepton and Hadron colliders:
A Comparative Analysis*
with U Baur and D Rainwater
Phys Rev D68 (2003) 033001
- 121 *Supersymmetric Dark Matter – How Light can the LSP Be?*
with D Hooper
Phys Lett B562 (2003) 18
- 122 *Stop Lepton Associated Production at Hadron Colliders*
with A Alves and O Eboli
Phys Lett B558 (2003) 165
- 123 *Determining the Higgs Boson Self Coupling at Hadron Colliders*
with U Baur and D Rainwater
Phys Rev D67 (2003) 033003
- 124 *Charged Higgs Boson Production in Bottom-Gluon Fusion*
Phys Rev D67 (2003) 014018
- 125 *Measuring the Higgs Boson Self Coupling at the LHC and Finite Top Mass Matrix Elements*
with U Baur and D Rainwater
Phys Rev Lett 89 (2002) 151801
- 126 *Higgs Decays to Muons in Weak Boson Fusion*
with D Rainwater
Phys Lett B520 (2001) 108

- 127 *Determining the Structure of Higgs Couplings at the LHC*
with D Rainwater and D Zeppenfeld
Phys Rev Lett 88 (2002) 051801
- 128 *CP-Violating Phases in SUSY, Electric Dipole Moments, and Linear Colliders*
with V Barger, T Falk, T Han, J Jiang, and T Li
Phys Rev D64 (2001) 056007
- 129 *$H \rightarrow WW$ as the Discovery Mode for a Light Higgs Boson*
with N Kauer, D Rainwater and D Zeppenfeld
Phys Lett B503 (2001) 113
- 130 *Probing Light Sbottoms with B Decays*
with U Nierste
Phys Lett B493 (2000) 104
- 131 *Single Stop Production at Hadron Colliders*
Phys Lett B488 (2000) 359
- 132 *A Method for Identifying $H \rightarrow \tau\tau \rightarrow e\mu p_T$ at the CERN LHC*
with D Rainwater and D Zeppenfeld
Phys Rev D61 (2000) 093005
- 133 *Physics Potential of a Tevatron Tripler*
with V Barger, K Cheung, T Han, C Kao, and R Zhang
Phys Lett B478 (2000) 224
- 134 *Measuring CP Violating Phases at a Future Linear Collider*
with V Barger, T Han and T Li
Phys Lett B475 (2000) 342
- 135 *The Production of Charginos/Neutralinos and Stopped at Hadron Colliders*
with W Beenakker, M Klasen, M Krämer, M Spira, and P Zerwas
Phys Rev Lett 83 (1999) 3780
- 136 *Probing the MSSM Higgs Sector via Gauge Boson Fusion at the LHC*
with D Rainwater and D Zeppenfeld
Phys Lett B454 (1999) 297
- 137 *Stop Production at Hadron Colliders*
with W Beenakker, M Krämer, M Spira, and P Zerwas
Nucl Phys B515 (1998) 3
- 138 *Production of Charged Higgs Boson Pairs in Gluon–Gluon Collisions*
with A Krause, M Spira and P Zerwas
Nucl Phys B519 (1998) 85
- 139 *Physics with e^+e^- Linear Colliders*
with E Accomando et al.
Phys Rep 299 (1998) 1
- 140 *Pair Production of Scalar Leptoquarks at the Tevatron*
with M Krämer, M Spira and P Zerwas
Phys Rev Lett 79 (1997) 341
- 141 *Formation and Decay of Scalar Leptoquarks/Squarks in $e p$ Collisions*
with H Spiesberger, M Spira and P Zerwas

Z Phys C74 (1997) 614

142 *Stop Decays in SUSY QCD*
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