Prof. C. Schweigert
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LIST OF PUBLICATIONS

All papers submitted to the arxiv can be obtained at `http://arxiv.org/a/schweigert_c_1`

Publications in refereed journals:

1. *"On the classification of $N = 2$ superconformal coset models"*
   Commun. Math. Phys. 149 (1992) 425 - 431

2. *"Non-Hermitian symmetric $N = 2$ coset models, Poincaré polynomials and string compactification"*
   (with J. Fuchs)
   Nucl. Phys. B 411 (1994) 181 - 222, arXiv:hep-th/9304133v1

3. *"Level-rank duality of WZW theories and isomorphisms of $N = 2$ coset models,"*
   (with J. Fuchs)
   Annals of Physics 234 (1994) 102 - 140, arXiv:hep-th/9307107v2

4. *"Poincaré polynomials and level-rank dualities in the $N = 2$ coset construction,"*
   Theor. Math. Phys. 98 (1994) 326 - 334, arXiv:hep-th/9311168v1

5. *"On the configuration space of gauge theories,"*
   (with J. Fuchs and M.G. Schmidt)
   Nucl. Phys. B 426 (1994) 107 - 128, hep-th/9404059

6. *"Modular invariants and fusion rule automorphisms from Galois theory,"*
   (with J. Fuchs, B. Gato-Rivera and A.N. Schellekens)
   Phys. Lett. B 334 (1994) 113 - 120, arXiv:hep-th/9405153v1

7. *"Extended geometry of black holes,"*
   (with K. Peeters and J.W. van Holten)
   Class. Quantum Grav. 12 (1995) 173 - 179, arXiv:gr-qc/9407006v1

8. *"Galois modular invariants of WZW models,"*
   (with J. Fuchs and A.N. Schellekens)
   Nucl. Phys. B 437 (1995) 667 - 694, arXiv:hep-th/9410010v1

9. *"Quasi-Galois symmetries of the modular S-matrix,"*
   (with J. Fuchs and A.N. Schellekens)
   Commun. Math. Phys. 176 (1996) 447 - 465, arXiv:hep-th/9412009v1

10. *"On the extended Poincaré polynomial,"*
    (with M. Kreuzer)
    Phys. Lett. B 352 (1995) 276 - 285, arXiv:hep-th/9503174v1

11. *"From Dynkin diagram symmetries to fixed point structures,"*
    (with J. Fuchs and A.N. Schellekens)
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12. *"The resolution of field identification fixed points in diagonal coset theories,"*
(with J. Fuchs and A.N. Schellekens)
Nucl. Phys. B 461 (1996) 371 - 404, arXiv:hep-th/9509105v1

13. *"A matrix S for all simple current extensions,"*
(with J. Fuchs and A.N. Schellekens)
Nucl. Phys. B 473 (1996) 323 - 366, arXiv:hep-th/9601078v2

14. *"Some automorphisms of Generalized Kac-Moody algebras,"*
(with J. Fuchs and U. Ray)
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15. *"WZW fusion rings in the limit of infinite level,"*
(with J. Fuchs)
Commun. Math. Phys. 185 (1997) 641 - 670, arXiv:hep-th/9609124v1

16. *"On moduli spaces of flat connections with non-simply connected structure group,"*
Nucl. Phys. B 492 (1997) 743 - 755, arXiv:hep-th/9611092v1

17. *"Systematic approach to cyclic orbifolds,"*
(with L. Borisov and M.B. Halpern)
Int. J. Mod. Phys. A 13 (1998) 125 - 168, arXiv:hep-th/9811211v1

18. *"A classifying algebra for boundary conditions,"*
(with J. Fuchs)
Phys. Lett. B 414 (1997) 251 - 259, arXiv:hep-th/9708141v1

19. *"A note on the geometry of CHL heterotic strings,"*
(with W. Lerche, R. Minasian, and S. Theisen)
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20. *"Branes: from free fields to general backgrounds,"*
(with J. Fuchs)
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21. *"The action of outer automorphisms on bundles of chiral blocks,"*
(with J. Fuchs)
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22. *"Completeness of boundary conditions for the critical three-state Potts model,"*
(with J. Fuchs)
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23. *"Orbifold analysis of broken bulk symmetries,"*
(with J. Fuchs)
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24. *"Symmetry breaking boundaries: I. General theory,"*
(with J. Fuchs)
Nucl. Phys. B, 558 (1999) 419 - 483, arXiv:hep-th/9902132v2

25. *"Symmetry breaking boundary conditions and WZW orbifolds,"*
(with L. Birke and J. Fuchs)
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26. *"Symmetry breaking boundaries: II. More structures, examples,"*
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27. *"New maverick coset theories,"*
(with B. Pedrini and J. Walcher)
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28. *"The geometry of WZW branes,"*
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29. *"Conformal boundary conditions and three-dimensional topological field theory,"*
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30. *"Correlation functions and boundary conditions in RCFT and three-dimensional topology,"*
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31. *"Universality in quantum Hall systems: coset construction of incompressible states,"*
(with J. Fröhlich, B. Pedrini and J. Walcher)
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32. *"Flux Stabilization of D-branes,"*
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33. *"Projections in string theory and boundary states for Gepner models,"*
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34. *"Solitonic sectors, alpha induction and symmetry breaking boundaries,"*
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35. *"Boundaries, crosscaps and simple currents,"*
(with J. Fuchs, L.R. Huiszoon, A.N. Schellekens and J. Walcher)
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36. *"Boundary Fixed Points, Enhanced Gauge Symmetry and Singular Bundles on K3,"*
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37. *"Flux stabilization in compact groups,"*
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39. *"Conformal Correlation Functions, Frobenius Algebras and Triangulations,"*
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40. *"A reason for fusion rules to be even,"*
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41. *"TFT construction of RCFT correlators I: Partition functions,"*
(with J. Fuchs and I. Runkel)
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42. *"An algorithm for twisted fusion rules,"*
(with T. Quella and I. Runkel)
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43. *"The world sheet revisited,"*
(with J. Fuchs)
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44. *"Category theory for conformal boundary conditions,"*
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45. *"Topologization of chiral representations,"*
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50. *"TFT construction of RCFT correlators IV: Structure constants and correlation functions,"*
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51. *"TFT construction of RCFT correlators V: Proof of modular invariance and factorisation,"*
(with J. Fjelstad, J. Fuchs and I. Runkel)
Theory and Applications of Categories 16 (2006) 342-433, arXiv:hep-th/0503194v2

52. *"Duality and defects in rational conformal field theory,"*
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53. *"Unoriented WZW Models and Holonomy of Bundle Gerbes,"*
(with U. Schreiber and K. Waldorf)
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54. *"Topological defects for the free boson CFT,"*
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55. *"Ribbon categories and (unoriented) CFT: Frobenius algebras, automorphisms, reversions,"*
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56. *"Topological and conformal field theory as Frobenius algebras,"*
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57. *"Bi-branes: Target Space Geometry for World Sheet topological Defects,"*
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58. *"Uniqueness of open/closed rational CFT with given algebra of open states,"*
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59. *"The fusion algebra of bimodule categories,"*
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60. *"Kramers-Wannier dualities for WZW theories and minimal models,"*
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61. *"Some remarks on defects and T-duality,"*
(with G. Sarkissian)
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62. *"The three-dimensional origin of the classifying algebra,"*
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63. *"Twenty five years of two-dimensional rational conformal field theory,"*
(with J. Fuchs and I. Runkel)
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64. *"On the Rosenberg-Zelinsky sequence in abelian monoidal categories,"*
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65. *"Module categories for permutation modular invariants,"*
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66. *"Hopf algebras and finite tensor categories in conformal field theory,"*
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67. *"Equivariance in higher geometry,"*
(with T. Nikolaus)
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68. *"The classifying algebra for defects,"*
(with J. Fuchs and Carl Stigner)
Nucl. Phys. B 843 (2011) 673-723, arXiv:1007.0401v1 [hep-th]

69. *"Modular categories from finite crossed modules"*
(with J. Maier)
Journal of Pure and Applied Algebra, 215 (2011) 2196-2208, arXiv:1003.2070 [math.QA]

70. *"A Geometric Construction for Permutation Equivariant Categories from Modular Functors,"*
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71. *"Equivariant modular categories via Dijkgraaf-Witten theory,"*
(with J. Maier and Th. Nikolaus)
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72. *"Modular invariant Frobenius algebras from ribbon Hopf algebra automorphisms,"*
(with J. Fuchs and C. Stigner)
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73. *"Strictification of weakly equivariant Hopf algebras,"*
(with J. Maier and Th. Nikolaus)
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74. *"Bicategories for boundary conditions and for surface defects in 3-d TFT,"*
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75. *"Higher genus mapping class group invariants from factorizable Hopf algebras,"*
(with J. Fuchs and C. Stigner)
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76. *"From non-semisimple Hopf algebras to correlation functions for logarithmic CFT,"*
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77. *"A geometric approach to boundaries and surface defects in Dijkgraaf-Witten theories,"*
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78. *"A note on permutation twist defects in topological bilayer phases,"*
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79. *"A Serre-Swan theorem for gerbe modules on étale Lie groupoids,"*
(with C. Tropp and A. Valentino)
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80. *"On the Brauer groups of symmetries of abelian Dijkgraaf-Witten theories,"*
(with J. Fuchs, J. Priel and A. Valentino)
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81. *"Partially dualized Hopf algebras have equivalent Yetter-Drinfel'd modules,"*
(with A. Barvels and S. Lentner)
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82. *"A trace for bimodule categories,"*
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83. *"Consistent systems of correlators in non-semisimple conformal field theory,"*
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84. *"Frobenius algebras and homotopy fixed points of group actions on bicategories,"*
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85. *"A GNS construction of three-dimensional abelian Dijkgraaf-Witten theories,"*
(with L. Müller)
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86. *"Hochschild Cohomology and the Modular Group,"*
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87. *"The logarithmic Cardy case: Boundary states and annuli,"*
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88. *"A Parallel Section Functor for 2-Vector Bundles,"*
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89. *"On unrolled Hopf algebras,"*
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92. *"Eilenberg-Watts calculus for finite categories and a bimodule Radford S^4 theorem,"*
(with J. Fuchs and G. Schaumann)
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93. *"Extended Homotopy Quantum Field Theories and their Orbifoldization,"*
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94. *"On isotypic decompositions for non-semisimple Hopf algebras"*
(with V. Koppen and E. Meir)
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95. *"Matrix product operator symmetries and intertwiners in string-nets with domain walls,"*
(with L. Lootens, J. Fuchs, J. Haegeman and Frank Verstraete)
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96. *"Bulk from boundary in finite CFT by means of pivotal module categories,"*
(with J. Fuchs)
Nucl. Phys. B 967 (2021) 115392, arXiv:2012.10159 [hep-th]

97. *"CFT correlators for Cardy bulk fields via string-net models,"*
(with Y. Yang)
SIGMA 17 (2021) 040, arXiv:1911.10147 [hep-th]

98. *"Homotopy Coherent Mapping Class Group Actions and Excision for Hochschild Complexes of Modular Categories,"*
(with L. Woike)
Adv. Math. 386(2021)107814, arXiv:2004.14343 [math.QA]

99. *"Internal natural transformations and Frobenius algebras in the Drinfeld center,"*
(with J. Fuchs)
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100. *"The Hochschild Complex of a Finite Tensor Category,"*
(with L. Woike)
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101. *"A modular functor from state sums for finite tensor categories and their bimodules,"*
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(with C. Galindo and D. Jaklitsch)
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(with L. Woike)
Algebras and Representation Theory (2022), arXiv:2103.15772 [math.QA]

105. *"Domain walls between 3d phases of Reshetikhin-Turaev TQFTs,"*
(with V. Koppen, V. Mulevicius and I. Runkel)
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106. *"Davydov-Yetter cohomology, comonads and Ocneanu rigidity,"*
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109. *"A G-equivariant String-Net Construction,"*
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110. *"Spherical Morita contexts and relative Serre functors,"*
(with J. Fuchs, C. Galindo and D. Jaklitsch)
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111. *"Davydov–Yetter cohomology and relative homological algebra,"*
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(with J. Fuchs, S. Wood and Y. Yang)
Encyclopedia of Mathematical Physics (Second Edition). Elsevier Ltd, Volume 3. p. 604–617
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116. *"A manifestly Morita-invariant construction of Turaev-Viro invariant,"*
(with J. Fuchs, C. Galindo and D. Jaklitsch)
ZMP-HH/24-13, Hamburger Beiträge zur Mathematik Nr. 970, arXiv:2407.10018 [math.QA], accepted for publication in Quantum topology.

117. *"Duality structures for module categories of vertex operator algebras and the Feigin Fuchs boson,"*
(with R. Allen, S. Lentner and S. Wood)
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(with J. Fuchs, G. Schaumann and S. Wood)
Contemporary Mathematics 813, 2025, arXiv:2306.17668 [math.CT]

Preprints:

1. *"String-net models for pivotal bicategories,"*
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ZMP-HH/23-1, Hamburger Beiträge zur Mathematik Nr. 937, arXiv:2302.01468 [math.QA]

2. *"The Lyubashenko Modular Functor for Drinfeld Centers via Non-Semisimple String-Nets,"*
(with L. Müller, L. Woike and Y. Yang)
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3. *"Grothendieck-Verdier module categories, Frobenius algebras and relative Serre functors,"*
(with J. Fuchs, G. Schaumann and S. Wood)
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5. *"An adjunction theorem for Davydov-Yetter cohomology and infinitesimal braidings,"*
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