

## PUBLICATIONS BY DANIEL GRUMILLER

Note: with one exception, in all publications the authors are ordered alphabetically, so that there is no significance of the relative positions of authors.

### Publications in peer reviewed journals

- [1] F. Ecker, D. Grumiller, C. Valcárcel and D. Vassilevich, “Equivalences between 2D dilaton gravities, their asymptotic symmetries, and their holographic duals,” *JHEP* **06** (2023) 151; 2304.08523.
- [2] F. Ecker, D. Grumiller and R. McNees, “dS<sub>2</sub> as excitation of AdS<sub>2</sub>,” *SciPost Phys.* **13** (2022) 119; 2204.00045.
- [3] A. Bagchi, D. Grumiller and P. Nandi, “Carrollian superconformal theories and super BMS,” *JHEP* **05** (2022) 044; arXiv:2202.01172.
- [4] H. Adami, D. Grumiller, M. M. Sheikh-Jabbari, V. Taghiloo, H. Yavartanoo and C. Zwickel, “Null boundary phase space: slicings, news & memory,” *JHEP* **2111** (2021) 155; arXiv:2110.04218.
- [5] D. Grumiller, R. Ruzziconi and C. Zwickel, “Generalized dilaton gravity in 2d,” *SciPost Phys.* **12** (2022) 032; arXiv:2109.03266.
- [6] A. Bagchi, S. Chakraborty, D. Grumiller, B. Radhakrishnan, M. Riegler and A. Sinha, “Non-Lorentzian chaos and cosmological holography,” *Phys. Rev.* **D104** (2021) L101901; arXiv:2106.07649.
- [7] D. Grumiller, J. Hartong, S. Prohazka and J. Salzer, “Limits of JT gravity,” *JHEP* **2102** (2021) 134; arXiv:2011.13870.
- [8] C. Ecker, D. Grumiller, H. Soltanpanahi and P. Stanzer, “QNEC2 in deformed holographic CFTs,” *JHEP* **2103** (2021) 213; arXiv:2007.10367.
- [9] D. Grumiller and R. McNees, “Universal flow equations and chaos bound saturation in 2d dilaton gravity,” *JHEP* **2101** (2021) 112; arXiv:2007.03673.
- [10] D. Grumiller, M. M. Sheikh-Jabbari and C. Zwickel, “Horizons 2020,” invited contribution in *Int. J. Mod. Phys.* **D29** (2020) 2043006; arXiv:2005.06936.
- [11] H. Adami, D. Grumiller, S. Sadeghian, M. M. Sheikh-Jabbari and C. Zwickel, “T-Witts from the horizon,” *JHEP* **2004** (2020) 128; arXiv:2002.08346.

- [12] H. Afshar, H. A. González, D. Grumiller and D. Vassilevich, “Flat space holography and the complex Sachdev-Ye-Kitaev model,” *Phys. Rev.* **D101** (2020) 086024; [arXiv:1911.05739](#).
- [13] D. Grumiller, M. M. Sheikh-Jabbari, C. Troessaert and R. Wutte, “Interpolating Between Asymptotic and Near Horizon Symmetries,” *JHEP* **2003** (2020) 035; [arXiv:1911.04503](#).
- [14] D. Grumiller, A. Pérez, M. M. Sheikh-Jabbari, R. Troncoso and C. Zwickel, “Spacetime structure near generic horizons and soft hair,” *Phys. Rev. Lett.* **124** (2020) 041601; [arXiv:1908.09833](#).
- [15] D. Grumiller, P. Parekh and M. Riegler, “Local quantum energy conditions in non-Lorentz-invariant quantum field theories,” *Phys. Rev. Lett.* **123** (2019) 121602; [arXiv:1907.06650](#).
- [16] D. Grumiller and W. Merbis, “Near horizon dynamics of three dimensional black holes,” *SciPost Phys.* **8** (2020) 010; [arXiv:1906.10694](#).
- [17] C. Ecker, D. Grumiller, W. van der Schee, M. M. Sheikh-Jabbari and P. Stanzer, “Quantum Null Energy Condition and its (non)saturation in 2d CFTs,” *SciPost Phys.* **6** (2019) 036; [arXiv:1901.04499](#).
- [18] M. Cárdenas, O. Fuentealba, H. A. González, D. Grumiller, C. Valcárcel and D. Vassilevich, “Boundary theories for dilaton supergravity in 2D,” *JHEP* **1811** (2018) 077; [arXiv:1809.07208](#).
- [19] D. Grumiller and M. M. Sheikh-Jabbari, “Membrane Paradigm from Near Horizon Soft Hair,” invited contribution in *Int. J. Mod. Phys.* **D27** (2018) 1847006; [arXiv:1805.11099](#).
- [20] H. A. González, D. Grumiller and J. Salzer, “Towards a bulk description of higher spin SYK,” *JHEP* **1805** (2018) 083; [arXiv:1802.01562](#).
- [21] D. Grumiller, P. Hacker and W. Merbis, “Soft hairy warped black hole entropy,” *JHEP* **1802** (2018) 010; [arXiv:1711.07975](#).
- [22] C. Ecker, D. Grumiller, W. van der Schee and P. Stanzer, “Saturation of the Quantum Null Energy Condition in Far-From-Equilibrium Systems,” *Phys. Rev.* **D97** (2018) 126016 ; [arXiv:1710.09837](#).
- [23] D. Grumiller, R. McNees, J. Salzer, C. Valcárcel and D. Vassilevich, “Menagerie of AdS<sub>2</sub> boundary conditions,” *JHEP* **1710** (2017) 203; [arXiv:1708.08471](#).

- [24] D. Grumiller, A. Perez, D. Tempo and R. Troncoso, “Log corrections to entropy of three dimensional black holes with soft hair,” *JHEP* **1708** (2017) 107; [arXiv:1705.10605](#).
- [25] H. Afshar, D. Grumiller, M. M. Sheikh-Jabbari and H. Yavartanoo, “Horizon fluff, semi-classical black hole microstates — Log-corrections to BTZ entropy and black hole/particle correspondence,” *JHEP* **1708** (2017) 087; [arXiv:1705.06257](#).
- [26] D. Grumiller, W. Merbis and M. Riegler, “Most general flat space boundary conditions in three-dimensional Einstein gravity,” invited contribution in *Class. Quant. Grav.* **34** (2017) 184001; [arXiv:1704.07419](#).
- [27] M. Ammon, D. Grumiller, S. Prohazka, M. Riegler and R. Wutte, “Higher-Spin Flat Space Cosmologies with Soft Hair,” *JHEP* **1705** (2017) 031; [arXiv:1703.02594](#).
- [28] E. Bergshoeff, D. Grumiller, S. Prohazka and J. Rosseel, “Three-dimensional Spin-3 Theories Based on General Kinematical Algebras,” *JHEP* **1701** (2017) 114; [arXiv:1612.02277](#).
- [29] H. Afshar, D. Grumiller, W. Merbis, A. Perez, D. Tempo and R. Troncoso, “Soft hairy horizons in three spacetime dimensions,” *Phys. Rev.* **D95** (2017) 106005; [arXiv:1611.09783](#).
- [30] C. Ecker, D. Grumiller, P. Stanzer, S. A. Stricker and W. van der Schee, “Exploring nonlocal observables in shock wave collisions,” *JHEP* **11** (2016) 054; [arXiv:1609.03676](#).
- [31] D. Grumiller and M. Riegler, “Most general AdS<sub>3</sub> boundary conditions,” *JHEP* **10** (2016) 023; [arXiv:1608.01308](#).
- [32] D. Grumiller, A. Perez, S. Prohazka, D. Tempo and R. Troncoso, “Higher Spin Black Holes with Soft Hair,” *JHEP* **10** (2016) 119; [arXiv:1607.05360](#).
- [33] H. Afshar, D. Grumiller and M. M. Sheikh-Jabbari, “Near horizon soft hair as microstates of three dimensional black holes,” *Phys. Rev.* **D96** (2017) 084032; [arXiv:1607.00009](#).
- [34] H. Afshar, S. Detournay, D. Grumiller, W. Merbis, A. Perez, D. Tempo and R. Troncoso, “Soft Heisenberg hair on black holes in three dimensions,” *Phys. Rev.* **D93** (2016) 101503(R); [arXiv:1603.04824](#).
- [35] H. Afshar, S. Detournay, D. Grumiller and B. Oblak, “Near-Horizon Geometry and Warped Conformal Symmetry,” *JHEP* **1603** (2016) 187; [arXiv:1512.08233](#).

- [36] A. Bagchi, D. Grumiller and W. Merbis, “Stress tensor correlators in three-dimensional gravity,” *Phys. Rev.* **D93** (2016) 061502(R); [arXiv:1507.05620](#).
- [37] V. Breunhölder, M. Gary, D. Grumiller and S. Prohazka, “Null warped AdS in higher spin gravity,” *JHEP* **1512** (2015) 021; [arXiv:1509.08487](#).
- [38] D. Grumiller, J. Salzer and D. Vassilevich, “AdS<sub>2</sub> holography is (non-)trivial for (non-)constant dilaton,” *JHEP* **1512** (2015) 015; [arXiv:1509.08486](#).
- [39] C. Ecker, D. Grumiller and S. A. Stricker, “Evolution of holographic entanglement entropy in an anisotropic system,” *JHEP* **1507** (2015) 146; [arXiv:1506.02658](#).
- [40] M. Gary, D. Grumiller, M. Riegler and J. Rosseel, “Flat space (higher spin) gravity with chemical potentials,” *JHEP* **1501** (2015) 152; [arXiv:1411.3728](#).
- [41] A. Bagchi, R. Basu, D. Grumiller and M. Riegler, “Entanglement entropy in Galilean conformal field theories and flat holography,” *Phys. Rev. Lett.* **114** (2015) 111602; [arXiv:1410.4089](#).
- [42] A. Bagchi, D. Grumiller, J. Salzer, S. Sarkar and F. Schöller, “Flat space cosmologies in two dimensions - Phase transitions and asymptotic mass-domination,” *Phys. Rev.* **D90** (2014) 084041; [arXiv:1408.5337](#).
- [43] D. Grumiller, R. McNees and J. Salzer, “Cosmological constant as confining U(1) charge in two-dimensional dilaton gravity,” *Phys. Rev.* **D90** (2014) 044032; [arXiv:1406.7007](#).
- [44] M. Gary, D. Grumiller, S. Prohazka and S. J. Rey, “Lifshitz Holography with Isotropic Scale Invariance,” *JHEP* **1408** (2014) 001; [arXiv:1406.1468](#).
- [45] H. Afshar, T. Creutzig, D. Grumiller, Y. Hikida and P. B. Rønne, “Unitary W-algebras and three-dimensional higher spin gravities with spin one symmetry,” *JHEP* **1406** (2014) 063; [arXiv:1404.0010](#).
- [46] D. Grumiller, M. Riegler and J. Rosseel, “Unitarity in three-dimensional flat space higher spin theories,” *JHEP* **1407** (2014) 015; [arXiv:1403.5297](#).
- [47] S. Detournay, D. Grumiller, F. Schöller and J. Simón, “Variational principle and 1-point functions in 3-dimensional flat space Einstein gravity,” *Phys. Rev.* **D89** (2014) 084061; [arXiv:1402.3687](#).

- [48] D. Grumiller, M. Leston and D. Vassilevich, “Anti-de Sitter holography for gravity and higher spin theories in two dimensions,” *Phys. Rev.* **D89** (2014) 044001; [arXiv:1311.7413](#).
- [49] D. Grumiller, M. Irakleidou, I. Lovrekovic and R. McNees, “Conformal gravity holography in four dimensions,” *Phys. Rev. Lett.* **112** (2014) 111102; [arXiv:1310.0819](#).
- [50] H. Afshar, A. Bagchi, R. Fareghbal, D. Grumiller and J. Rosseel, “Higher spin theory in 3-dimensional flat space,” *Phys. Rev. Lett.* **111** (2013) 121603; [arXiv:1307.4768](#).
- [51] A. Bagchi, S. Detournay, D. Grumiller and J. Simon, “Cosmic evolution from phase transition of 3-dimensional flat space,” *Phys. Rev. Lett.* **111** (2013) 181301 [arXiv:1305.2919](#).
- [52] A. Bagchi and D. Grumiller, “Holograms of flat space,” invited contribution in *Int. J. Mod. Phys.* **D22** (2013) 1342003.
- [53] R. Emparan, D. Grumiller and K. Tanabe, “Large D gravity and low D strings,” *Phys. Rev. Lett.* **110** (2013) 251102; [arXiv:1303.1995](#).
- [54] D. Grumiller, W. Riedler, J. Rosseel and T. Zojer, “Holographic applications of logarithmic conformal field theories,” invited contribution in *J. Phys.* **A46** (2013) 494002; [arXiv:1302.0280](#).
- [55] J. Aparicio, D. Grumiller, E. Lopez, I. Papadimitriou and S. Stricker, “Bootstrapping gravity solutions,” *JHEP* **05** (2013) 128; [arXiv:1212.3609](#).
- [56] M. Bertin, S. Ertl, H. Ghorbani, D. Grumiller, N. Johansson, and D. Vassilevich, “Lobachevsky holography in conformal Chern–Simons gravity,” *JHEP* **06** (2013) 015; [arXiv:1212.3335](#).
- [57] H. Afshar, M. Gary, D. Grumiller, R. Rashkov and M. Riegler, “Semi-classical unitarity in 3-dimensional higher-spin gravity for non-principal embeddings,” invited contribution in *Class. Quant. Grav.* **30** (2013) 104004; [arXiv:1211.4454](#).
- [58] D. Grumiller, R. McNees and S. Zonetti, “Black holes in the conical ensemble,” *Phys. Rev.* **D86** (2012) 124043; [arXiv:1210.6904](#).
- [59] H. Afshar, M. Gary, D. Grumiller, R. Rashkov and M. Riegler, “Non-AdS holography in 3-dimensional higher spin gravity – General recipe and example,” *JHEP* **11** (2012) 099; [arXiv:1209.2860](#).
- [60] A. Bagchi, S. Detournay and D. Grumiller, “Flat-Space Chiral Gravity,” *Phys. Rev. Lett.* **109** (2012) 151301; [arXiv:1208.1658](#).

- [61] S. Deser, S. Ertl and D. Grumiller, “Canonical bifurcation in higher derivative, higher spin, theories,” invited contribution in *J. Phys.* **A46** (2013) 214018; [arXiv:1208.0339](#).
- [62] G. Mocanu and D. Grumiller, “Self-organized criticality in boson clouds around black holes,” *Phys. Rev.* **D85** (2012) 105022; [arXiv:1203.4681](#).
- [63] M. Gary, D. Grumiller and R. Rashkov, “Towards non-AdS holography in 3-dimensional higher spin gravity,” *JHEP* **03** (2012) 022; [arXiv:1201.0013](#).
- [64] H. Afshar, B. Cvetkovic, S. Ertl, D. Grumiller and N. Johansson, “Conformal Chern-Simons holography – lock, stock and barrel,” *Phys. Rev.* **D85** (2012) 064033; [arXiv:1110.5644](#).
- [65] S. Carlip, D. Grumiller, “Lower bound on the spectral dimension near a black hole,” *Phys. Rev.* **D84** (2011) 084029; [arXiv:1108.4686](#).
- [66] D. Grumiller, F. Preis, “Rindler force at large distances,” invited contribution in *Int. J. Mod. Phys.* **D20** (2011) 2761; [arXiv:1107.2373](#).
- [67] H. Afshar, B. Cvetkovic, S. Ertl, D. Grumiller, N. Johansson, “Holograms of Conformal Chern-Simons Gravity,” *Phys. Rev.* **D84** (2011) 041502(R); [arXiv:1106.6299](#).
- [68] M. Bertin, D. Grumiller, D. Vassilevich, T. Zojer, “Generalised massive gravity one-loop partition function and AdS/(L)CFT,” *JHEP* **06** (2011) 111; [arXiv:1103.5468](#).
- [69] S. Carloni, D. Grumiller, F. Preis, “Solar system constraints on Rindler acceleration,” *Phys. Rev.* **D83** (2011) 124024; [arXiv:1103.0274](#).
- [70] D. Grumiller, “Model for gravity at large distances,” *Phys. Rev. Lett.* **105** (2010) 211303; [arXiv:1011.3625](#). Erratum *ibid.* **106** (2011) 039901.
- [71] D. Grumiller, N. Johansson, T. Zojer, “Short-cut to new anomalies in gravity duals to logarithmic conformal field theories,” *JHEP* **01** (2011) 090; [arXiv:1010.4449](#).
- [72] M. R. Gaberdiel, D. Grumiller, D. Vassilevich, “Graviton 1-loop partition function for 3-dimensional massive gravity,” *JHEP* **11** (2010) 094; [arXiv:1007.5189](#).
- [73] S. Ertl, D. Grumiller, N. Johansson, “All stationary axi-symmetric local solutions of topologically massive gravity,” *Class. Quant. Grav.* **27** (2010) 225021; [arXiv:1006.3309](#).

- [74] D. Grumiller and O. Hohm, “AdS<sub>3</sub>/LCFT<sub>2</sub> – Correlators in New Massive Gravity,” *Phys. Lett.* **B686** (2010) 264; [arXiv:0911.4274](#).
- [75] D. Grumiller and I. Sachs, “AdS<sub>3</sub>/LCFT<sub>2</sub> – Correlators in Cosmological Topologically Massive Gravity,” *JHEP* **03** (2010) 012; [0910.5241](#).
- [76] D. Grumiller and P. van Nieuwenhuizen, “Holographic counterterms from local supersymmetry without boundary conditions,” *Phys. Lett.* **B682** (2010) 462; [arXiv:0908.3486](#).
- [77] A. Castro, D. Grumiller, F. Larsen and R. McNees, “Holographic Description of AdS<sub>2</sub> Black Holes,” *JHEP* **11** (2008) 052; [arXiv:0809.4264](#).
- [78] D. Grumiller and N. Johansson, “Consistent boundary conditions for cosmological topologically massive gravity at the chiral point,” invited contribution in *Int. J. Mod. Phys.* **D17** (2009) 2367; [arXiv:0808.2575](#).
- [79] D. Grumiller and N. Johansson, “Instability in cosmological topologically massive gravity at the chiral point,” *JHEP* **07** (2008) 134; [arXiv:0805.2610](#).
- [80] D. Grumiller and P. Romatschke, “On the collision of two shock waves in AdS<sub>5</sub>,” *JHEP* **08** (2008) 027; [arXiv:0803.3226](#).
- [81] D. Grumiller, R. B. Mann and R. McNees, “Dirichlet boundary value problem for Chern-Simons modified gravity,” *Phys. Rev.* **D78** (2008) 081502(R); [arXiv:0803.1485](#).
- [82] P. Castorina, D. Grumiller and A. Iorio, “The Exact String Black-Hole behind the hadronic Rindler horizon?,” *Phys. Rev.* **D77** (2008) 124034; [arXiv:0802.2286](#).
- [83] D. Grumiller and N. Yunes, “How do Black Holes Spin in Chern-Simons Modified Gravity?,” *Phys. Rev.* **D77** (2008) 044015; [arXiv:0711.1868](#).
- [84] D. Grumiller and R. Jackiw, “Einstein-Weyl from Kaluza-Klein,” *Phys. Lett.* **A372** (2008) 2547 – 2551; [arXiv:0711.0181](#).
- [85] M. Adak and D. Grumiller, “Poisson-sigma model for 2D gravity with non-metricity,” *Class. Quant. Grav.* **24** (2007) F65–F72; [arXiv:0706.4070](#).
- [86] D. Grumiller and R. McNees, “Thermodynamics of black holes in two (and higher) dimensions,” *JHEP* **04** (2007) 074, [hep-th/0703230](#).
- [87] D. Grumiller and R. Jackiw, “Duality in 2-dimensional dilaton gravity,” *Phys. Lett.* **B642** (2006) 530–534, [hep-th/0609197](#).

- [88] D. Grumiller and R. Jackiw, “Kaluza-Klein reduction of conformally flat spaces,” invited contribution in *Int. J. Mod. Phys. D* **15** (2006) 2075–2094, [math-ph/0609025](#).
- [89] D. Grumiller and R. Meyer, “Quantum dilaton gravity in two dimensions with fermionic matter,” *Class. Quant. Grav.* **23** (2006) 6435–6458, [hep-th/0607030](#).
- [90] L. Bergamin and D. Grumiller, “Killing horizons kill horizon degrees,” invited contribution in *Int. J. Mod. Phys. D* **15** (2006) 2279–2284, [gr-qc/0605148](#).
- [91] H. Balasin and D. Grumiller, “Large scale non-Newtonian behavior in weak field Einstein gravity,” invited contribution, *Int. J. Mod. Phys. D* **17** (2008) 475 – 488, extended version of “Significant reduction of galactic dark matter by general relativity,” [astro-ph/0602519](#).
- [92] L. Bergamin, D. Grumiller, W. Kummer, and D. V. Vassilevich, “Physics-to-gauge conversion at black hole horizons,” *Class. Quant. Grav.* **23** (2006) 3075–3101, [hep-th/0512230](#).
- [93] D. Grumiller, “An action for the exact string black hole,” *JHEP* **05** (2005) 028, [hep-th/0501208](#).
- [94] D. V. Ahluwalia-Khalilova and D. Grumiller, “Spin half fermions with mass dimension one: Theory, phenomenology, and dark matter,” *JCAP* **0507** (2005) 012, [hep-th/0412080](#).
- [95] H. Balasin, C. G. Boehmer, and D. Grumiller, “The spherically symmetric standard model with gravity,” *Gen. Rel. Grav.* **37** (2005) 1435–1482, [gr-qc/0412098](#).
- [96] L. Bergamin, D. Grumiller, W. Kummer, and D. V. Vassilevich, “Classical and quantum integrability of 2D dilaton gravities in Euclidean space,” *Class. Quant. Grav.* **22** (2005) 1361–1382, [hep-th/0412007](#).
- [97] D. V. Ahluwalia-Khalilova and D. Grumiller, “Dark matter: A spin one half fermion field with mass dimension one?,” *Phys. Rev. D* **72** (2005) 067701, [hep-th/0410192](#).
- [98] L. Bergamin, D. Grumiller, A. Iorio, and C. Nuñez, “Chemistry of Chern-Simons supergravity: Reduction to a BPS kink, oxidation to M-theory and thermodynamical aspects,” *JHEP* **11** (2004) 021, [hep-th/0409273](#).
- [99] D. Grumiller, “Virtual Black Holes and the S-matrix,” invited contribution in *Int. J. Mod. Phys. D* **13** (2004) 1973–2002, [hep-th/0409231](#).



- [100] D. Grumiller and D. Mayerhofer, “On static solutions in 2d dilaton gravity with scalar matter,” *Class. Quant. Grav.* **21** (2004) 5893–5914, [gr-qc/0404013](#).
- [101] L. Bergamin, D. Grumiller, and W. Kummer, “Quantization of 2d dilaton supergravity with matter,” *JHEP* **05** (2004) 060, [hep-th/0404004](#).
- [102] H. Balasin and D. Grumiller, “The ultrarelativistic limit of 2d dilaton gravity and its energy momentum tensor,” *Class. Quant. Grav.* **21** (2004) 2859–2872, [gr-qc/0312086](#).
- [103] L. Bergamin, D. Grumiller, and W. Kummer, “Supersymmetric black holes in 2d dilaton supergravity: baldness and extremality,” *J. Phys.* **A37** (2004) 3881–3901, [hep-th/0310006](#).
- [104] D. Grumiller, “Long time black hole evaporation with bounded Hawking flux,” *JCAP* **05** (2004) 005, [gr-qc/0307005](#).
- [105] D. Grumiller and W. Kummer, “The classical solutions of the dimensionally reduced gravitational Chern-Simons theory,” *Ann. Phys.* **308** (2003) 211–221, [hep-th/0306036](#).
- [106] D. Grumiller, W. Kummer, and D. V. Vassilevich, “Positive specific heat of the quantum corrected dilaton black hole,” *JHEP* **07** (2003) 009, [hep-th/0305036](#).
- [107] D. Grumiller and D. V. Vassilevich, “Non-existence of a dilaton gravity action for the exact string black hole,” *JHEP* **11** (2002) 018, [hep-th/0210060](#).
- [108] D. Grumiller, W. Kummer, and D. V. Vassilevich, “Virtual black holes in generalized dilaton theories (and their special role in string gravity),” *European Phys. J.* **C30** (2003) 135–143, [hep-th/0208052](#).
- [109] D. Grumiller, W. Kummer, and D. V. Vassilevich, “Dilaton gravity in two dimensions,” *Phys. Rept.* **369** (2002) 327–429, [hep-th/0204253](#); invited review article.
- [110] D. Grumiller, “Virtual black hole phenomenology from 2d dilaton theories,” *Class. Quant. Grav.* **19** (2002) 997–1009, [gr-qc/0111097](#).
- [111] P. Fischer, D. Grumiller, W. Kummer, and D. V. Vassilevich, “S-matrix for s-wave gravitational scattering,” *Phys. Lett.* **B521** (2001) 357–363, [gr-qc/0105034](#). Erratum *ibid.* **B532** (2002) 373.

- [112] D. Grumiller, D. Hofmann, and W. Kummer, “2D gravity without test particles is pointless (Comment on hep-th/0011136),” *Mod. Phys. Lett. A* **16** (2001) 1597–1600, [arXiv:gr-qc/0012026](#).
- [113] D. Grumiller, D. Hofmann, and W. Kummer, “Two-dilaton theories in two dimensions,” *Annals Phys.* **290** (2001) 69–82, [gr-qc/0005098](#).
- [114] D. Grumiller, W. Kummer, and D. V. Vassilevich, “The virtual black hole in 2d quantum gravity,” *Nucl. Phys.* **B580** (2000) 438–456, [gr-qc/0001038](#).
- [115] D. Grumiller and W. Kummer, “Absolute conservation law for black holes,” *Phys. Rev.* **D61** (2000) 064006, [gr-qc/9902074](#).

## Peer-reviewed proceedings contributions

- [116] H. González, D. Grumiller, W. Merbis and R. Wutte, “New entropy formula for Kerr black holes,” *EPJ Web Conf.* **168** (2018) 01009; [arXiv:1709.09667](#).
- [117] D. Grumiller, J. Salzer and D. Vassilevich, “Aspects of AdS<sub>2</sub> holography with non-constant dilaton,” in *International Workshop on Strong Field Problems in Quantum Theory*, Tomsk, 2016; *Russ. Phys. J.* **59** (2017) 1798; [arXiv:1607.06974](#).
- [118] D. Grumiller and W. Merbis, “Free energy of topologically massive gravity and flat space holography,” *Springer Proc. Phys.* **208** (2018) 95-103 (2018); proceedings of second Karl Schwarzschild meeting; [arXiv:1509.08505](#).
- [119] H. Afshar, A. Bagchi, S. Detournay, D. Grumiller, S. Prohazka and M. Riegler, “Holographic Chern-Simons Theories,” *Lecture Notes in Physics* (2014) Springer; [arXiv:1404.1919](#).
- [120] D. Grumiller and N. Johansson, “Gravity duals for logarithmic conformal field theories,” *J. Phys. Conf. Ser.* **222** (2010) 012047. [arXiv:1001.0002](#).
- [121] L. Bergamin, D. Grumiller, R. McNees and R. Meyer, “Black Hole Thermodynamics and Hamilton-Jacobi Counterterm,” *J. Phys.* **A41** (2008) 164068; [arXiv:0710.4140](#).
- [122] J. E. Āman, J. Bedford, D. Grumiller, N. Pidokrajt, and J. Ward, “Ruppeiner theory of black hole thermodynamics,” *J. Phys. Conf. Ser.* **66** (2007) 012007, [gr-qc/0611119](#).

- [123] D. Grumiller and R. Meyer, “Ramifications of lineland,” *Turk. J. Phys.* **30** (2006) 349–378, [hep-th/0604049](#).
- [124] D. Grumiller, “The volume of 2D black holes,” *J. Phys. Conf. Ser.* **33** (2006) 361–366, [gr-qc/0509077](#).
- [125] D. Grumiller, W. Kummer, and D. V. Vassilevich, “A note on the triviality of kappa-deformations of gravity,” *Ukr. J. Phys.* **48** (2003) 329–333, [hep-th/0301061](#).
- [126] D. Grumiller, “The virtual black hole in 2D quantum gravity and its relevance for the S-matrix,” *Int. J. Mod. Phys. A* **17** (2001) 989–992, [hep-th/0111138](#).

## Further proceedings contributions

- [127] D. Grumiller and R. Jackiw, “Liouville gravity from Einstein gravity,” in *Recent Developments in Theoretical Physics*, S. Gosh and G. Kar, eds. World Scientific, Singapore, 2010; [arXiv:0712.3775](#).
- [128] D. Grumiller, “Path integral for half-binding potentials as quantum mechanical analog for black hole partition functions,” in *Path Integrals – New Trends and Perspectives*, W. Janke and A. Pelster, eds., World Scientific, 2008; [arXiv:0711.4115](#).
- [129] L. Bergamin and D. Grumiller, “Black holes as boundaries in 2D dilaton supergravity,” in *Proceedings of the Eleventh Marcel Grossmann Meeting on General Relativity*, H. Kleinert, R. Jantzen, and R. Ruffini, eds. World Scientific, Singapore, 2007.
- [130] D. Grumiller, “Logarithmic corrections to the entropy of the exact string black hole,” in *Path Integrals from Quantum Information to Cosmology*, C. Burdick, N. Navratil, and S. Posta, eds. JINR Publishing Department, Prague, June, 2005. [hep-th/0506175](#).
- [131] D. Grumiller, “Deformations of the Schwarzschild black hole,” [gr-qc/0311011](#). Invited talk at the Tenth Marcel Grossmann meeting in Rio de Janeiro.
- [132] D. Grumiller and W. Kummer, “How to approach quantum gravity: Background independence in 1+1 dimensions,” in *What comes beyond the Standard Model? Symmetries beyond the standard model*, N. M. Borstnik, H. B. Nielsen, C. D. Froggatt, and D. Lukman, eds., vol. 4 of *Bled Workshops in Physics*, pp. 184–196, EURESCO. Portoroz, Slovenia, July, 2003. [gr-qc/0310068](#). based upon two talks.

- [133] D. Grumiller, “Three functions in dilaton gravity: The good, the bad and the muggy,” in *Proceedings of International Workshop on Mathematical Theories and their Applications*, S. Moskaliuk, ed., pp. 59–96, TIMPANI. Cernivtsi, Ukraine, 2004. [hep-th/0305073](#).
- [134] D. Grumiller, “Virtual black holes in generic 2d dilaton gravity,” in *Proceedings of ICHEP 2002*, S. Bentvelsen, P. de Jong, J. Koch, and E. Laenen, eds., pp. 870–871. 2003. ISBN 0-444-513434.
- [135] D. Grumiller, “Absolute conservation law for Schwarzschild black holes,” in *Geometry and Quantum Physics, LNP 0543*, H. Gausterer, H. Grosse, and L. Pittner, eds. Springer, 2000. Proceedings of the 38. Internationale Universitätswochen für Kern- und Teilchenphysik in Schladming, Austria, January 9 - 16 1999.

## Book

- [136] D. Grumiller and M.M. Sheikh-Jabbari, *Black Hole Physics — From Collapse to Evaporation*, Springer Graduate Texts in Physics (2022) ISSN 1868-4513, ISBN 978-3-031-10342-1.

## Book contributions

- [137] D. Grumiller, R. McNees and J. Salzer, “Black holes and thermodynamics — The first half century,” *Fundam. Theor. Phys.* **178** (2015) 27; invited contribution to *Quantum Aspects of Black Hole Physics*, Springer, edited by X. Calmet; [arXiv:1402.5127](#).
- [138] D. Grumiller, R. Jackiw and N. Johansson, “Canonical analysis of cosmological topologically massive gravity at the chiral point,” contribution to *Wolfgang Kummer Memorial Volume*, World Scientific; [arXiv:0806.4185](#).
- [139] D. Grumiller, “The Reissner Nordström Black Hole.” in *Concise Encyclopedia of Supersymmetry*, Kluwer Academic Publishers, Dordrecht, edited by J. Bagger, S. Duplij and W. Siegel.
- [140] D. Grumiller, W. Kummer, and D. Vassilevich, “Quantum dilaton gravity in two dimensions.” in the second edition of *Classics of World Science* **4**, edited by S. Moskaliuk.

## Popular science publications

- [141] D. Grumiller and M. Riegler, “Wieviel Energie kann man sich vom Vakuum borgen?” *Physik in unserer Zeit* **52** (2021) 38-42. doi:10.1002/piuz.202001592. (in German)
- [142] D. Grumiller, “Die dunkle Seite des Universums.” *Die Münze* **33** (2022) 4-8. (in German)
- [143] D. Grumiller, “Was in den Sternen steht.” *Die Münze* **34** (2023) 4-8. (in German)

## Unpublished

- [144] A. Fiorucci, D. Grumiller and R. Ruzziconi, “Logarithmic Celestial Conformal Field Theory,” arXiv:2305.08913. Submitted to *Phys. Rev. Lett.*
- [145] A. Bagchi, D. Grumiller and M. M. Sheikh-Jabbari, “Horizon Strings as 3d Black Hole Microstates,” arXiv:2210.10794. Submitted to *JHEP*.
- [146] M. Dorband, D. Grumiller, R. Meyer and S. Zhao, “Disorder in AdS<sub>3</sub>/CFT<sub>2</sub>,” arXiv:2204.00596. Submitted to *SciPost Physics*.
- [147] D. Grumiller, M. Laihartinger and R. Ruzziconi, “Minkowski and (A)dS ground states in general 2d dilaton gravity,” arXiv:2204.00264. Invited proceedings contribution, in print.
- [148] S. Detournay, D. Grumiller, M. Riegler and Q. Vandermiers, “Uniformization of Entanglement Entropy in Holographic Warped Conformal Field Theories,” arXiv:2006.16167.
- [149] D. Grumiller, *Gravity in 2D and 3D — A romance of lower dimensions*. Habilitation thesis. Technische Universität Wien, 2010.
- [150] D. Grumiller and A. M. Piso, “Exact relativistic viscous fluid solutions in near horizon extremal Kerr background,” arXiv:0909.2041.
- [151] D. Grumiller, *Quantum dilaton gravity in two dimensions with matter*. PhD thesis, Technische Universität Wien, 2001. gr-qc/0105078. Awarded with Victor-Hess prize in 2003.

## Publications as editor

- [152] D. Grumiller, A. Rebhan and D. Vassilevich (Eds.), “Fundamental Interactions – A Memorial Volume for Wolfgang Kummer”, World Scientific (2010).
- [153] D. Ahluwalia-Khalilova and D. Grumiller (Eds.), *Int. J. Mod. Phys. D15* (2006), “Review Papers and Selected Essays from the Gravity Research Foundation Annual Essay Competition 2006”.
- [154] D. Ahluwalia-Khalilova and D. Grumiller (Eds.), *Int. J. Mod. Phys. D14* (2006), “Invited Papers on the Thirring-Lense Effect, Other Invited Reviews, and Selected Essays from the Annual Essay Competition of the Gravity Research Foundation for the Year 2005”.

This list was compiled on June 27, 2023.

## Bibliometry

Daniel Grumiller’s  $h$ -Index according to different sources is 42 (INSPIRE) / 36 (Web of Science) / 46 (Google Scholar)