

C.Wetterich

List of Publications, 2011-2017

- 264) N. Nunes, L. Schrempp, C. Wetterich: Mass freezing in growing neutrino quintessence, arXiv: 1102.1664 [astro-ph. CO], Phys. Rev. **D83** (2011) 083523
- 265) C. Wetterich: Classical probabilities for Majorana and Weyl spinors, arXiv: 1102.3586 [hep-th], Annals of Phys. **326** (2011) 2243
- 266) I. Boettcher, S. Floerchinger, C.Wetterich: Collective modes for precision measurements on cold trapped gases, arXiv: 1103.5342 [cond-mat.quant-gas], J. Phys. B: At.Mol.Opt. Phys. **44** (2011) 235301
- 267) M. Baldi, V. Pettorino, L. Amendola, C. Wetterich: Oscillating nonlinear large scale structure in growing neutrino quintessence, arXiv: 1106.2161[astro-ph.CO], MNRAS **418** (2011) 214
- 268) A. Knochel, C. Wetterich: Theoretical constraints on new generations with and without Quarks and Neutrinos, arXiv: 1106.2609[hep-th], Phys. Lett. **B706** (2012) 320
- 269) D. Ludwig, S. Floerchinger, S. Moroz, C. Wetterich: Quantum phase transitions in Bose-Fermi mixtures, arXiv: 1107.1196[cond-mat.quant-gas], Phys. Rev. **A84** (2011) 033629
- 270) C. Wetterich: Lattice spinor gravity, arXiv: 1108.1313[hep-th], Phys. Lett **B704** (2011) 612-619
- 271) C. Wetterich: Lattice diffeomorphism invariance, arXiv: 1110.1539[hep-th], Phys. Rev. **D85** (2012) 104017
- 272) C. Wetterich: Quantum field theory from classical statistics, arXiv: 1111.4115[hep-th]
- 273) C. Wetterich: Where to look for solving the gauge hierarchy problem?, arXiv: 1112.2910 [hep-ph], Phys. Lett. **B718** (2012) 573-576
- 274) Y. Ayaita, M.Weber, C. Wetterich: Structure Formation and Backreaction in Growing Neutrino Quintessence, arXiv: 1112.4762 [astro-ph.CO], Phys. Rev. **D85** (2012) 123010
- 275) C. Wetterich: Spinor gravity and diffeomorphism symmetry on the lattice, arXiv: 1201.2871 [gr-qc], Lect. Notes Phys. **863** (2013) 67-92
- 276) C. Wetterich: Quantum fermions and quantum field theory from classical statistics, arXiv: 1201.6212 [quant-ph], J. Phys.: Conf. Ser. 361 (2012) 012031

- 277) C. Wetterich: Geometry and symmetries in lattice spinor gravity, arXiv: 1201.6505 [hep-th], Annals of Phys. **327** (2012) 2184-2244
- 278) S. Floerchinger, C. Wetterich: Chemical freeze-out in heavy ion collisions at large baryon densities, arXiv: 1202.1671 [nucl-th], Nucl. Phys. A **890-891** (2012) 11-24
- 279) C. Wetterich: Universality of geometry, arXiv: 1203.5214 [gr-qc], Phys. Lett. **B712** (2012) 126-131
- 280) D. Sexty, C. Wetterich: Emergent gravity in two dimensions, arXiv: 1208.2168 [hep-th], Nucl. Phys. **B867** (2013) 290-329
- 281) I. Böttcher, S. Diehl, J. Pawłowski, C. Wetterich: Tan contact and universal high momentum behavior of the fermion propagator in the BCS-BEC crossover, arXiv: 1209.5641 [cond-mat.quant-gas], Phys. Rev. **A87** (2013) 023606
- 282) Y. Ayaita, M. Weber, C. Wetterich: Neutrino lump fluid in growing neutrino quintessence, arXiv: 1211.6589 [astro-ph.CO], Phys. Rev. **D87** (2013) 4, 043519
- 283) C. Wetterich: Scalar lattice gauge theory, arXiv: 1212.3507 [hep-lat], Nucl. Phys. **B876** (2013) 147-168
- 284) D. Schnoerr, I. Boettcher, J. Pawłowski, C. Wetterich: Error estimates and specification parameters for functional renormalization, arXiv: 1301.4169 [cond-mat.quant-gas], Annals Phys. **334** (2013) 83-99
- 285) V. Pettorino, L. Amendola, C. Wetterich: How early is early dark energy?, arXiv: 1301.5279 [astro-ph.CO], Phys. Rev. **D87** (2013) 083009
- 286) C. Wetterich: Cosmon inflation, arXiv: 1303.4700 [astro-ph.CO], Phys. Lett. **B726** (2013) 15-22
- 287) C. Wetterich: A Universe without expansion, arXiv: 1303.6878 [astro-ph.CO], Dark Universe **2** (2013) 184-187
- 288) T. Henz, J. M. Pawłowski, A. Rodigast, C. Wetterich: Dilaton Quantum Gravity, arXiv: 1304.7743 [hep-th], Phys. Lett. **B727** (2013) 298-302
- 289) C. Wetterich: Linear lattice gauge theory, arXiv: 1307.0722 [hep-lat], Nucl. Phys. **B884** (2014), 44-65
- 290) C. Wetterich: Variable gravity Universe, arXiv: 1308.1019 [astro-ph.CO], Phys. Rev. **D89** (2014) 024005
- 291) S. Flörchinger, C. Wetterich: Isotropization from Color Field Condensate in heavy ion collisions, arXiv: 1311.5389 [hep-ph], JHEP1403 (2014) 121

- 292) I. Böttcher, J. M. Pawłowski, C. Wetterich: Critical temperature and superfluid gap of the Unitary Fermi Gas from Functional Renormalization, arXiv: 1312.0505 [cond-mat.quant-gas], Phys. Rev. **A89** (2014) 053630
- 293) C. Wetterich: Hot big bang or slow freeze?, arXiv: 1401.5313 [astro-ph.CO], Phys. Lett. **B736** (2014) 506-514
- 294) C. Wetterich: Modified gravity and coupled quintessence, arXiv: 1402.5031 [astro-ph.CO], Lecture Notes in Physics **892** (2015) 57-95
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- 296) J. Beyer, C. Wetterich.: Small scale structures in coupled scalar field dark matter, arXiv: 1407.0141 [astro-ph.CO], Phys. Lett. **B738** (2014) 418-423
- 297) Y. Ayaita, M. Baldi, F. Föhner, E. Puchwein, C. Wetterich: Nonlinear growing neutrino cosmology, arXiv: 1407.8414 [astro-ph.CO], Phys. Rev. **D93** (2016) 063511
- 298) C. Wetterich: Inflation, quintessence, and the origin of mass, arXiv: 1408.0156 [hep-th], Nucl. Phys. **B897** (2015) 111-178
- 299) I. Boettcher, J. Braun, T. K. Herbst, J. M. Pawłowski, D. Roscher, C. Wetterich: Phase structure of spin-imbalanced unitary Fermi gases, arXiv: 1409.5070 [cond-mat.quant-gas], Phys. Rev. **A91** (2015) 1013610
- 300) I. Boettcher, T. K. Herbst, J. M. Pawłowski, N. Strodthoff, L. von Smekal, C. Wetterich: Sarma phase in relativistic and non-relativistic systems, arXiv: 1409.5232 [cond-mat.quant-gas], Phys. Lett. **B742** (2015) 86-93
- 301) C. Wetterich: Can observations look back to the beginning of inflation?, arXiv:1503.04698 [gr-qc], Phys. Lett. **B754** (2016) 109-113
- 302) C. Wetterich: Cosmic fluctuations from quantum effective action, arXiv: 1503.07860 [gr-qc], Phys. Rev. **D92** (2015) 8083507
- 303) F. Föhner, C. Wetterich: Backreaction in growing neutrino quintessence, arXiv: 1503.07995 [astro-ph.CO], Phys. Rev. **D91** (2015) 12123542
- 304) C. Wetterich: Primordial cosmic fluctuations for variable gravity, arXiv: 1511.03530[gr-qc], JCAP 05 (2016) 041
- 305) S. Lammers, I. Boettcher, C. Wetterich: Dimensional crossover of non-relativistic bosons, arXiv: 1603.02409 [cond-mat.quant-gas], Phys. Rev. **A93** (2016) 063631
- 306) C. Wetterich: Quantum correlations for the metric, arXiv: 1603.06504, Phys. Rev. **D95** (2017)123525

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- 309) C.Wetterich: Gauge symmetry from decoupling, arXiv: 1608.01515, Nucl.Phys. **B915** (2017) 135-167
- 310) S.Casas, V. Pettorino, C. Wetterich: Dynamics of neutrino lumps in growing neutrino quintessence, arXiv: 1608.02358, Phys. Rev. **D94** (2016) 103518
- 311) C. Wetterich: Information transport in classical statistical systems, arXiv: 1611.04820 [cond-mat. stat-mech], Nucl. Phys. **B927** (2018) 35-96
- 312) C. Wetterich, M. Yamada: Gauge hierarchy problem in asymptotically safe gravity – the resurgence mechanism, arXiv: 1612.03069 [hep-th], Phys. Lett. **B770** (2017) 268-271
- 313) C. Wetterich: Fermions as generalized Ising models, arXiv: 1612.06695 [cond-mat. stat-mech], Nucl. Phys. **B917** (2017) 241-271
- 314) C.Wetterich: Graviton fluctuations erase the cosmological constant, arXiv: 1704.08040 [gr-qc], Phys. Lett. **B773** (2017) 6-19
- 315) J. Rubio, C. Wetterich: Emergent scale symmetry connecting inflation and dark energy, arXiv: 1705.00552 [gr-qc], Phys. Rev. **D96** (2017) 063509
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- 317) C.Wetterich: Gauge invariant fields and flow equations for Yang-Mills theories, arXiv: 1710.02494[hep-th], Nucl. Phys. **B934** (2018)265
- 318) A.Eichhorn, A. Held; C. Wetterich: Quantum gravity predictions for the fine structure constant, arXiv: 1711.02949 [hep-th], Phys. Lett. **B782** (2018) 198
- 319) L. Amendola, J. Rubio, C. Wetterich: Primordial black holes from fifth forces, arXiv: 1711.09915 [astro-ph.CO], Phys. Rev. **D97** (2018) 0181302