

2013 CCTP PUBLICATIONS

Jan' - Dec'2013

1. **On novel string theories from 4d gauge theories**
[Elias Kiritsis](#). Jan 2013. 17 pp.
CCTP-2013-01
e-Print: [arXiv:1301.6810](#) [hep-th] | [PDF](#)
2. **The black M2-M5 ring intersection spins**
[Vasilis Niarchos](#), [Konstadinos Siampos](#). Feb 2013. 29 pp.
CCTP-2013-02, CPHT-RR027.0612
Conference: [C12-09-08.2](#)
e-Print: [arXiv:1302.0854](#) [hep-th] | [PDF](#)
3. **Moduli space of supersymmetric QCD in the Veneziano limit**
[Yang Chen](#), [Niko Jokela](#), [Matti Jarvinen](#), [Noppadol Mekareeya](#). Mar 25, 2013. 38 pp.
CCTP-2013-05, MPP-2013-77
e-Print: [arXiv:1303.6289](#) [hep-th] | [PDF](#)
4. **Heavy ions and string theory**
[Oliver DeWolfe](#), [Steven S. Gubser](#), [Christopher Rosen](#), [Derek Teaney](#). Apr 29, 2013. 81 pp.
COLO-HEP-579, PUPT-2446, CCTP-2013-06
e-Print: [arXiv:1304.7794](#) [hep-th] | [PDF](#)
5. **The spectrum of (h)QCD in the Veneziano limit**
[Daniel Arean](#), [Ioannis Iatrakis](#), [Matti Jarvinen](#). May 27, 2013. 16 pp.
CCTP-2013-03
Conference: [C12-09-08.2](#)
e-Print: [arXiv:1305.6294](#) [hep-ph] | [PDF](#)
6. **The Perils of Analytic Continuation**
[S.P. Miao](#) (U. Utrecht), [P.J. Mora](#) (U. Florida), [N.C. Tsamis](#) (U. Crete), [R.P. Woodard](#) (U. Florida). Jun 23, 2013. 40 pp.
CCTP-2013-08, UFIFT-QG-13-03
e-Print: [arXiv:1306.5410](#) [gr-qc] | [PDF](#)
7. **Pure Gravitational Back-Reaction Observables**
[N.C. Tsamis](#) (U. Crete), [R.P. Woodard](#) (U. Florida). Jun 27, 2013. 15 pp.
CCTP-2013-09, UFIFT-QG-13-06
e-Print: [arXiv:1306.6441](#) [gr-qc] | [PDF](#)
8. **Hartree approximation to the one loop quantum gravitational correction to the graviton mode function on de Sitter**
[P.J. Mora](#) (Florida), [N.C. Tsamis](#) (Crete), [R.P. Woodard](#) (Florida). Jul 4, 2013. 16 pp.
Published in JCAP 1310 (2013) 018
UFIFT-QG-13-04, CCTP-2013-10
DOI: [10.1088/1475-7516/2013/10/018](#)
e-Print: [arXiv:1307.1422](#) | [PDF](#), [arXiv:1307.1422](#) | [PDF](#)

9. **Asymptotic freedom, asymptotic flatness and cosmology**
[Elias Kiritsis](#) ([APC, Paris](#) & [Crete U.](#) & [CERN](#)). Jul 22, 2013. 17 pp.
Published in **JCAP 1311 (2013) 011**
CCTP-2013-11
e-Print: [arXiv:1307.5873](#) [hep-th] | [PDF](#)

10. **Bremsstrahlung and black hole production from collisions of ultra-boosted particles at non-zero impact parameter**
[Yiannis Constantinou](#) ([Crete U.](#)), [Anastasios Taliotis](#) ([Crete U.](#) & [Vrije U., Brussels](#) & [Intl. Solvay Inst., Brussels](#)). Aug 12, 2013. 27 pp.
Published in **JHEP 1311 (2013) 175**
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DOI: [10.1007/JHEP11\(2013\)175](#)
e-Print: [arXiv:1308.2544](#) [hep-th] |

11. **The discontinuities of conformal transitions and mass spectra of V-QCD**
[Daniel Areán](#) ([ICTP, Trieste](#) & [INFN, Trieste](#)), [Ioannis Iatrakis](#) ([Crete U.](#) & [SUNY, Stony Brook](#)), [Matti Järvinen](#) ([Crete U.](#)), [Elias Kiritsis](#) ([Crete U.](#) & [APC, Paris](#) & [CERN](#)). Sep 9, 2013. 116 pp.
Published in **JHEP 1311 (2013) 068**
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DOI: [10.1007/JHEP11\(2013\)068](#)
e-Print: [arXiv:1309.2286](#) [hep-ph] | [PDF](#)

12. **Constraints on Majorana Dark Matter from a Fourth Lepton Family**
[Tuomas Hapola](#), [Matti Jarvinen](#), [Chris Kouvaris](#), [Paolo Panci](#), [Jussi Virkajarvi](#). Sep 24, 2013. 23 pp.
CCTP-2013-13, CP3-ORIGINS-2013-035-DNRF90, DIAS-2013-35, IPPP-13-75, -- DCPT-13-150
e-Print: [arXiv:1309.6326](#) [hep-ph] | [PDF](#)

13. **Holographic RG flows and nearly-marginal operators**
[Jun Bourdier](#) ([King's Coll. London, Dept. Math](#)), [Elias Kiritsis](#) ([APC, Paris](#) & [CERN](#) & [Crete U.](#)). Oct 2, 2013. 18 pp.
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DOI: [10.1088/0264-9381/31/3/035011](#)
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14. **Where the world stands still: turnaround as a strong test of Λ CDM cosmology**
[Vasiliki Pavlidou](#), [Theodore N. Tomaras](#). Oct 7, 2013. 5 pp.
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e-Print: [arXiv:1310.1920](#) [astro-ph.CO] | [PDF](#)

15. **Vector Bremsstrahlung by Ultrarelativistic Collisions in Higher Dimensions**
[Yiannis Constantinou](#) ([Crete U.](#)), [Pavel Spirin](#) ([Moscow State U.](#)). Oct 22, 2013. 57 pp.
Published in **JHEP 1401 (2014) 111**
CCTP-2013-18
DOI: [10.1007/JHEP01\(2014\)111](#)

16. **SLE boundary visits**
[Niko Jokela](#) ([Santiago de Compostela U.](#) & [IGFAE, Santiago de Compostela](#)), [Matti Järvinen](#) ([Crete U.](#)), [Kalle Kytölä](#) ([Helsinki U.](#)). Nov 10, 2013. 57 pp.
CCTP-2013-14
e-Print: [arXiv:1311.2297](#) [math-ph] | [PDF](#)

17. **The confining trailing string**
[E. Kiritsis](#) (APC, Paris & CERN & Crete U.), [Liuba Mazzanti](#) (Utrecht U. & Utrecht U., Spinoza Inst.), [F. Nitti](#) (APC, Paris). Nov 11, 2013. 82 pp.
 CCTP-2011-29
 e-Print: [arXiv:1311.2611](#) [hep-th] | [PDF](#)
18. **Gravitational collapse and thermalization in the hard wall model**
[Ben Craps](#) (Vrije U., Brussels & Intl. Solvay Inst., Brussels), [Elias Kiritsis](#) (APC, Paris & CERN & Crete U.), [Christopher Rosen](#) (Crete U.), [Anastasios Taliotis](#), [Joris Vanhoof](#), [Hongbao Zhang](#) (Vrije U., Brussels & Intl. Solvay Inst., Brussels). Nov 29, 2013. 32 pp.
 CCTP-2013-20, CCQCN-2013-07, CERN-PH-TH/2013-267
 e-Print: [arXiv:1311.7560](#) [hep-th] | [PDF](#)
19. **Is the Chiral Vortical Effect Vanishing in Heavy Ion Collisions?**
[Karl Landsteiner](#) (Madrid, Autonoma U. & Madrid, IFT), [Eugenio Megias](#) (Barcelona, Autonoma U. & Barcelona, IFAE), [Francisco Pena-Benitez](#) (Madrid, IFT & Madrid, Autonoma U. & Crete U.). Dec 4, 2013. 20 pp.
 IFT-UAM-CSIC-13-132, UAB-FT-748, CCTP-2013-22, CCQCN-2013-12
 e-Print: [arXiv:1312.1204](#) [hep-ph] | [PDF](#)
20. **A holographic model for OCD in the Veneziano limit at finite temperature and density**
[T. Alho](#), [M. Jarvinen](#), [K. Kajantie](#), [E. Kiritsis](#), [C. Rosen](#), [K. Tuominen](#). Dec 18, 2013. 72 pp.
 CCTP-2013-19, CCQCN-2013-6, HIP-2013-20/TH
 e-Print: [arXiv:1312.5199](#) [hep-ph] | [PDF](#)
21. **Minding the Gap in N=4 Super-Yang-Mills**
[Oliver DeWolfe](#), [Steven S. Gubser](#), [Christopher Rosen](#). Dec 27, 2013. 50 pp.
 COLO-HEP-583, PUPT-2457, CCTP-2014-25 CCQCN -2014-15
 e-Print: [arXiv:1312.7347](#) [hep-th] | [PDF](#)

2013 ASSOCIATED MEMBERS

Jan' - Dec'2013

1. **One Loop Field Strengths of Charges and Dipoles on a Locally de Sitter Background**
[H. Degueldre](#) (MPI, Goettingen), [R. P. Woodard](#) (U. Florida) Mar 2013
 Comments: 35 pages, no figures, uses LaTeX 2e
 Subjects: General Relativity and Quantum Cosmology (gr-qc); Cosmology and Extragalactic Astrophysics (astro-ph.CO); High Energy Physics - Theory (hep-th)
[arXiv:1303.3042](#) [[pdf](#), [ps](#), [other](#)]
2. **Graviton Corrections to Vacuum Polarization during Inflation**
[Katie E. Leonard](#), [R.P. Woodard](#). Apr 26, 2013. 36 pp.
 UFIFT-QG-13-02
 e-Print: [arXiv:1304.7265](#) [gr-qc] | [PDF](#)

3. **Lifshitz as a deformation of Anti-de Sitter**
[Yegor Korovin](#), [Kostas Skenderis](#), [Marika Taylor](#). Apr 29, 2013. 70 pp.
e-Print: [arXiv:1304.7776](#) [hep-th] | [PDF](#)

4. **Implications of conformal invariance in momentum space**
[Adam Bzowski](#), [Paul McFadden](#), [Kostas Skenderis](#). Apr 29, 2013. 62 pp.
e-Print: [arXiv:1304.7760](#) [hep-th] | [PDF](#)

5. **Enhanced and continuous electrostatic carrier doping on the SrTiO₃ surface**
[Azar B. Eyvazov](#), [Isao H. Inoue](#), [Pablo Stoliar](#), [Marcelo J. Rozenberg](#), [Christos Panagopoulos](#) May 2013
Comments: Supplementary Information: [this http URL](#)>
Journal-ref: Scientific Reports 3, 1721 (2013)
Subjects: Materials Science (cond-mat.mtrl-sci); Mesoscale and Nanoscale Physics (cond-mat.mes-hall); Strongly Correlated Electrons (cond-mat.str-el)
e-Print: [arXiv:1305.1440](#) [[pdf](#), [other](#)]

6. **Aspects of String Cosmology**
[Costas Kounnas](#), [Nicolaos Toumbas](#) May 2013
Comments: 42 pages, 3 figures, references added. Lectures given at the Corfu Summer Institute 2012
Subjects: High Energy Physics - Theory (hep-th)
[arXiv:1305.2809](#) [[pdf](#), [other](#)]

7. **Lifshitz from AdS at finite temperature and top down models**
[Yegor Korovin](#), [Kostas Skenderis](#), [Marika Taylor](#). Jun 14, 2013. 35 pp.
e-Print: [arXiv:1306.3344](#) [hep-th] | [PDF](#)

8. **Universal scaling properties of extremal cohesive holographic phases**
[B. Goutéraux](#) ([Nordita](#) & [Stockholm U.](#)). Aug 9, 2013. 35 pp.
Published in **JHEP 1401 (2014) 080**
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9. **Instabilities near the QCD phase transition in the holographic models**
[Umut Gursoy](#), [Shu Lin](#), [Edward Shuryak](#). Sep 3, 2013. 11 pp.
Published in **Phys.Rev. D88 (2013) 105021**
RBRC-1034, ITP-UU-13-24, SPIN-13-17
DOI: [10.1103/PhysRevD.88.105021](#)
e-Print: [arXiv:1309.0789](#) [hep-th] | [PDF](#)

10. **Holographic perfect fluidity, Cotton energy-momentum duality and transport properties**
[Ayan Mukhopadhyay](#), [Anastasios C. Petkou](#), [P. Marios Petropoulos](#), [Valentina Pozzoli](#), [Konstadinos Siampos](#). Sep 9, 2013. 1+36 pp.
CPHT-RR085.1112
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11. **3-Cocycles, Non-Associative Star-Products and the Magnetic Paradigm of R-Flux String Vacua**
[Ioannis Bakas](#), [Dieter Lust](#). Sep 12, 2013. 58 pp.
LMU-ASC-64-13, MPP-2013-255
e-Print: [arXiv:1309.3172](#) [hep-th] | [PDF](#)

12. **Thermal conductivity of anisotropic spin - 1/2 two leg ladder:Green's function approach**
[Hamed Rezanian](#), [Abdollah Langari](#), [Paul H. M. van Loosdrecht](#), [Xenophon Zotos](#)
(Submitted on 22 Oct 2013)

13. **Phonon-Magnon Interaction in Low Dimensional Quantum Magnets Observed by Dynamic Heat Transport Measurements**
[Matteo Montagnese](#), [Marian Otter](#), [Xenophon Zotos](#), [Dmitry A. Fishman](#), [Nikolai Hlubek](#), [Oleg Mityashkin](#), [Christian Hess](#), [Romuald Saint-Martin](#), [Surjeet Singh](#), [Alexandre Revcolevschi](#), and [Paul H. M. van Loosdrecht](#)
Phys. Rev. Lett. 110, 147206 – Published 4 April 2013

14. **Cosmological Perturbations Across an S-brane**
[Robert H. Brandenberger](#), [Costas Kounnas](#), [Herve Partouche](#), [Subodh P. Patil](#), [N. Toumbas](#).
Dec 9, 2013. 30 pp.
CERN-PH-TH-2013-289, CPHT-RR001.0113, LPTENS-13-18
e-Print: [arXiv:1312.2524](#) [hep-th] | [PDF](#)

15. **AdS/Ricci-flat correspondence**
[M.M. Caldarelli](#), [J. Camps](#), [B. Goutéraux](#), [K. Skenderis](#). Dec 30, 2013. 32 pp.
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