

PUBLICATION LIST

1. **M. Biagetti**, V. De Luca, G. Franciolini, A. Kehagias, A. Riotto, “*The Formation Probability of Primordial Black Holes*”, *PLB* 820 (2021) 136602, *arXiv: 2105.07810*
2. A. Moradinezhad Dizgah, **M. Biagetti**, E. Sefusatti, V. Desjacques, J. Noreña, “*Primordial Non-Gaussianity from Biased Tracers: Likelihood Analysis of Real-Space Power Spectrum and Bispectrum*”, *JCAP* 05 (2021) 015, *arXiv: 2010.14523*
3. **M. Biagetti**, A. Cole, G. Shiu, “*The Persistence of Large Scale Structures I: Primordial non-Gaussianity*”, *JCAP* 04 (2021) 061, *arXiv:2009.04819*
4. **M. Biagetti**, G. Orlando, “*Primordial Gravitational Waves from Galaxy Intrinsic Alignments*”, *JCAP* 07 (2020) 005, *arXiv:2001.05930*
5. **M. Biagetti**, “*The Hunt for Primordial Interactions in the Large Scale Structures of the Universe*”, *Galaxies* 7, 3 (2019), *arXiv:1906.12244*
6. F. Beutler, **M. Biagetti**, D. Green, A. Slosar, B. Wallisch, “*Primordial Features from Linear to Nonlinear Scales*”, *PRR* 1,3, 033209 (2019), *arXiv: 1906.08758*
7. **M. Biagetti**, G. Franciolini, A. Kehagias, A. Riotto, “*Primordial Black Holes from Inflation and Quantum Diffusion*”, *JCAP* 1807, 032 (2018), *arXiv:1804.07124*
8. **M. Biagetti**, M. Fasiello, E. Dimastrogiovanni, “*Possible Signatures of the Inflationary Particle Content: Spin-2 fields*”, *JCAP* 1710, 038 (2017), *arXiv:1708.01587*
9. **M. Biagetti**, T. Lazeyras, T. Baldauf, V. Desjacques, F. Schmidt, “*Verifying the consistency relation for the scale dependent bias from local primordial non-Gaussianity*”, *MNRAS* 468, 3 (2017), *arXiv:1611.04901*
10. **M. Biagetti**, M. Fasiello, E. Dimastrogiovanni, M. Peloso, “*Gravitational Waves and Scalar Perturbations from Spectator Fields*”, *JCAP* 1504, 011 (2015), *arXiv:1411.3029*
11. **M. Biagetti**, V. Desjacques, A. Kehagias and A. Riotto, “*Nonlocal halo bias with and without massive neutrinos*”, *PRD* D90, 045022 (2014), *arXiv:1405.1435*
12. **M. Biagetti**, M. Fasiello, A. Riotto, “*Enhancing Inflationary Tensor Modes Through Spectator Fields*”, *PRD* D88 103518 (2013), *arXiv:1305.7241*

12 pubblicazioni

1. **G. Cabass**, E. Pajer, D. Stefanyszyn, J. Supet — *Bootstrapping Large Graviton non-Gaussianities* — <https://arxiv.org/abs/2109.10189>, accepted by JHEP
2. **G. Cabass** — *Zoology of Graviton non-Gaussianities* — <https://arxiv.org/abs/2103.09816>, JCAP 2112, 001 (2021)
3. **G. Cabass** — *The EFT Likelihood for Large-Scale Structure in Redshift Space* — <https://arxiv.org/abs/2007.14988>, JCAP 2101, 067 (2021)
4. F. Schmidt, **G. Cabass**, J. Jasche, G. Lavaux — *Unbiased Cosmology Inference from Biased Tracers using the EFT Likelihood* — <https://arxiv.org/abs/2004.06707>, JCAP 2011, 008 (2020)
5. L. Bordin and **G. Cabass** — *Graviton non-Gaussianities and Parity Violation in the EFT of Inflation* — <https://arxiv.org/abs/2004.00619>, JCAP 2007, 014 (2020)
6. **G. Cabass** and F. Schmidt — *The EFT Likelihood for Large-Scale Structure* — <https://arxiv.org/abs/1909.04022>, JCAP 2004, 042 (2020)
7. L. Bordin and **G. Cabass** — *Probing higher-spin fields from inflation with higher-order statistics of the CMB* — <https://arxiv.org/abs/1902.09519>, JCAP 1906, 050 (2019)
8. **G. Cabass**, E. Pajer and F. Schmidt — *Imprints of Oscillatory Bispectra on Galaxy Clustering* — <https://arxiv.org/abs/1804.07295>, JCAP 1809, 003 (2018)
9. L. Bordin, **G. Cabass**, P. Creminelli and F. Vernizzi — *Simplifying the EFT of Inflation: Generalized Disformal Transformations and Redundant Couplings* — <https://arxiv.org/abs/1706.03758>, JCAP 1709, 043 (2017)
10. **G. Cabass**, E. Pajer and F. Schmidt — *How Gaussian can our Universe be?* — <https://arxiv.org/abs/1612.00033>, JCAP 1701, 003 (2017)
11. **G. Cabass**, A. Melchiorri and E. Pajer — *μ -Distortions or Running: A Guaranteed Discovery from CMB Spectrometry* — <https://arxiv.org/abs/1602.05578>, Phys.Rev. D93 (2016) no.8, 083515
12. **G. Cabass**, L. Pagano, L. Salvati, M. Gerbino, E. Giusarma and A. Melchiorri — *Updated Constraints and Forecasts on Primordial Tensor Modes* — <https://arxiv.org/abs/1511.05146>, Phys.Rev. D93 (2016) no.6, 063508

Tesi di dottorato

File “g_cabass-phd_thesis.pdf”.

Data

PRINCETON, 19 APRILE 2022

Firma



ELENCO DELLE PUBBLICAZIONI PRESENTATE

Giovanni Antonio Chirilli

1. High-energy Operator Product Expansion at sub-eikonal level,
Giovanni Antonio Chirilli,
JHEP **06** (2021), 096 [arXiv:2101.12744 [hep-ph]].
DOI: 10.1007/JHEP06(2021)096 *10 citations counted in INSPIRE as of 20 April 2022;*
2. Sub-eikonal corrections to scattering amplitudes at high energy,
autore: Giovanni Antonio Chirilli,
JHEP **1901**, 118 (2019) [arXiv:1807.11435 [hep-ph]] da pag. 1 a pag. 47
DOI:10.1007/JHEP01(2019)118.
38 citations counted in INSPIRE as of 20 April 2022;
3. $\gamma^*\gamma^*$ Cross Section at NLO and Properties of the BFKL Evolution at Higher Orders
autori: Giovanni A. Chirilli, Yuri V. Kovchegov
JHEP **1504**, 099 (2014) da pag. 1 a pag. 42,
DOI: 10.1007/JHEP05(2014)099.
27 citations counted in INSPIRE as of 20 April 2022;
4. Rapidity evolution of Wilson lines at the next-to-leading order,
autori: I. Balitsky and G. A. Chirilli,
Phys. Rev. D **88** (*Rapid Communications*), (2013) 111501 [arXiv:1309.7644 [hep-ph]] da pag. 111501-1 a pag. 111501-6,
DOI: 10.1103/PhysRevD.88.111501.
114 citations counted in INSPIRE as of 20 April 2022;
5. Solution of the NLO BFKL Equation and the Strategy for Solving the All-Order BFKL Equation,
autori: Giovanni A. Chirilli and Yuri V. Kovchegov,
JHEP **1306**, 055 (2013) da pag. 1 a pag. 27,
DOI:10.1007/JHEP06(2013)055.
30 citations counted in INSPIRE as of 20 April 2022;
6. Photon impact factor and k_T -factorization for DIS in the next-to-leading order,
autori: I. Balitsky and G. A. Chirilli
Phys. Rev. D **87**, (2013) 014013 [arXiv: 1207.3844[hep-ph]] da pag. 014013-1 a pag. 014013-15,
DOI: 10.1103/PhysRevD.87.014013.
99 citations counted in INSPIRE as of 20 April 2022;



7. Inclusive Hadron Productions in pA Collisions,
 autori: Giovanni A. Chirilli, Bo-Wen Xiao and Feng Yuan,
 Phys. Rev. D **86** (2012) 054005 [arXiv: 1203.6139 [hep-ph]] da pag. 054005-1
 a pag. 054005-18,
 DOI: 10.1103/PhysRevD.86.054005.
152 citations counted in INSPIRE as of 20 April 2022;

8. One-loop Factorization for Inclusive Hadron Production in pA Collision in the
 Saturation Formalism,
 autori: Giovanni A. Chirilli, Bo-Wen Xiao and Feng Yuan,
 Phys. Rev. Lett. **108**, 122301 (2012) [arXiv: 1112.1061 [hep-ph]] da pag.
 122301-1 a pag. 122301-5,
 DOI: 10.1103/PhysRevLett.108.122301.
135 citations counted in INSPIRE as of 20 April 2022;

9. Photon impact factor in the next-to-leading order,
 autori: I. Balitsky and G. A. Chirilli,
 Phys. Rev. D **83** (Rapid Communications), (2011) 031502 [arXiv:1009.4729
 [hep-ph]] da pag. 031502-1 a pag. 031502-5,
 DOI: 10.1103/PhysRevD.83.031502.
104 citations counted in INSPIRE as of 20 April 2022;

10. High-energy amplitudes in $\mathcal{N}=4$ SYM in the next-to-leading order,
 autori: I. Balitsky, G. A. Chirilli,
 Physics Letters B **687** (2010) da pag. 204 a pag. 213,
 DOI:10.1016/j.physletb.2010.02.084.
50 citations counted in INSPIRE as of 20 April 2022;

11. NLO evolution of color dipoles in $\mathcal{N}=4$ SYM,
 autori: I. Balitsky, G. A. Chirilli,
 Nuclear Physics B **822** (2009) da pag. 45 a pag. 87,
 DOI:10.1016/j.nuclphysb.2009.07.003.
90 citations counted in INSPIRE as of 20 April 2022;

12. Next-to-leading order evolution of color dipoles,
 autori: I. Balitsky, G. A. Chirilli,
 Physical Review D **77** (2008) da pag. 014019-1 a pag. 014019-43,
 DOI: 10.1103/PhysRevD.77.014019.
354 citations counted in INSPIRE as of 20 April 2022;

Regensburg 21/04/2022

2

Giovanni A. Chirilli

ELENCO DELLE PUBBLICAZIONI PRESENTATE

MARCO CRISOSTOMI

L'ordine degli autori è sempre alfabetico, eccetto che in [3].

- [1] **Self-accelerating universe in scalar-tensor theories after GW170817**
M. C. and K. Koyama
Phys. Rev. D **97**, no. 8, 084004 (2018) [[arXiv:1712.06556](#)] [[INSPIRE](#)]
- [2] **Vainshtein mechanism after GW170817**
M. C. and K. Koyama
Phys. Rev. D **97**, no. 2, 021301 (2018) [[arXiv:1711.06661](#)] [[INSPIRE](#)]
- [3] **Beyond Lovelock gravity: Higher derivative metric theories**
M. C., K. Noui, C. Charmousis and D. Langlois
Phys. Rev. D **97**, no. 4, 044034 (2018) [[arXiv:1710.04531](#)] [[INSPIRE](#)]
- [4] **Higher Derivative Field Theories: Degeneracy Conditions and Classes**
M. C., R. Klein and D. Roest
JHEP **1706**, 124 (2017) [[arXiv:1703.01623](#)] [[INSPIRE](#)]
- [5] **Degenerate higher order scalar-tensor theories beyond Horndeski up to cubic order**
J. Ben Achour, M. C., K. Koyama, D. Langlois, K. Noui and G. Tasinato
JHEP **1612**, 100 (2016) [[arXiv:1608.08135](#)] [[INSPIRE](#)]
- [6] **Extended Scalar-Tensor Theories of Gravity**
M. C., K. Koyama and G. Tasinato
JCAP **1604**, no. 04, 044 (2016) [[arXiv:1602.03119](#)] [[INSPIRE](#)]
- [7] **Horndeski: beyond, or not beyond?**
M. C., M. Hull, K. Koyama and G. Tasinato
JCAP **1603**, no. 03, 038 (2016) [[arXiv:1601.04658](#)] [[INSPIRE](#)]
- [8] **FRW Cosmological Perturbations in Massive Bigravity**
D. Comelli, M. C. and L. Pilo
Phys. Rev. D **90**, 084003 (2014) [[arXiv:1403.5679](#)] [[INSPIRE](#)]
- [9] **Degrees of Freedom in Massive Gravity**
D. Comelli, M. C., F. Nesti and L. Pilo
Phys. Rev. D **86**, 101502(R) (2012) [[arXiv:1204.1027](#)] [[INSPIRE](#)]
- [10] **Perturbations in Massive Gravity Cosmology**
D. Comelli, M. C. and L. Pilo
JHEP **06** (2012) 085 [[arXiv:1202.1986](#)] [[INSPIRE](#)]
- [11] **FRW cosmology in ghost free massive gravity from bigravity**
D. Comelli, M. C., F. Nesti and L. Pilo
JHEP **03** (2012) 067 [[arXiv:1111.1983](#)] [[INSPIRE](#)]
- [12] **Spherically Symmetric Solutions in Ghost-Free Massive Gravity**
D. Comelli, M. C., F. Nesti and L. Pilo
Phys. Rev. D **85** (2012) 024044 [[arXiv:1110.4967](#)] [[INSPIRE](#)]

Trieste, April 15, 2022

Crisostomi Marco

Elenco delle pubblicazioni - Pietro Donà

email: dona.pietro@gmail.com
ORCID: 0000-0001-7341-0682
Inspire HEP: P.Dona.1

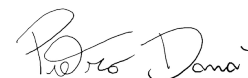
1. E. Bianchi, P. Dona and S. Speziale, *Polyhedra in loop quantum gravity*,
Phys. Rev. D 83 (2011), 044035 doi:10.1103/PhysRevD.83.044035
2. P. Dona, A. Eichhorn and R. Percacci, *Matter matters in asymptotically safe quantum gravity*,
Phys. Rev. D 89 (2014) no.8, 084035 doi:10.1103/PhysRevD.89.084035
3. P. Dona, A. Eichhorn, P. Labus and R. Percacci, *Asymptotic safety in an interacting system of gravity and scalar matter*, Phys. Rev. D 93 (2016) no.4, 044049 doi:10.1103/PhysRevD.93.044049
4. P. Dona, S. Giaccari, L. Modesto, L. Rachwal and Y. Zhu, *Scattering amplitudes in super-renormalizable gravity*, JHEP 08 (2015), 038 doi:10.1007/JHEP08(2015)038
5. P. Dona, M. Fanizza, G. Sarno and S. Speziale, *SU(2) graph invariants, Regge actions and polytopes*,
Class. Quant. Grav. 35 (2018) no.4, 045011 doi:10.1088/1361-6382/aaa53a
6. P. Dona and G. Sarno, *Numerical methods for EPRL spin foam transition amplitudes and Lorentzian recoupling theory*, Gen. Rel. Grav. 50 (2018), 127 doi:10.1007/s10714-018-2452-7
7. P. Dona, M. Fanizza, G. Sarno and S. Speziale, *Numerical study of the Lorentzian Engle-Pereira-Rovelli-Livine spin foam amplitude*, Phys. Rev. D 100 (2019) no.10, 106003
doi:10.1103/PhysRevD.100.106003
8. E. Bianchi and P. Dona, *Typical entanglement entropy in the presence of a center: Page curve and its variance*, Phys. Rev. D 100 (2019) no.10, 105010 doi:10.1103/PhysRevD.100.105010
9. P. Dona, F. Gozzini and G. Sarno, *Searching for classical geometries in spin foam amplitudes: a numerical method*, Class. Quant. Grav. 37 (2020) no.9, 094002 doi:10.1088/1361-6382/ab7ee1
10. P. Dona, F. Gozzini and G. Sarno, *Numerical analysis of spin foam dynamics and the flatness problem*,
Phys. Rev. D 102 (2020) no.10, 106003 doi:10.1103/PhysRevD.102.106003
11. P. Dona, M. Fanizza, P. Martin-Dussaud and S. Speziale, *Asymptotics of $SL(2, \mathbb{C})$ coherent invariant tensors*, Commun. Math. Phys. 389 (2022) no.1, 399-437 doi:10.1007/s00220-021-04154-3
12. A. Di Biagio, P. Dona and C. Rovelli, *The arrow of time in operational formulations of quantum theory*,
Quantum 5 (2021), 520 doi:10.22331/q-2021-08-09-520

PH. D. THESIS

13. Ph.D. Thesis, Pietro Dona, *Matter fields, gravity and Asymptotic Safety*

19/04/2022

Pietro Dona



12 PUBLICATIONS

- *Name:* Giuseppe Fanizza
- *Birthplace and Birthdate:* Fasano (BR), Italy, 14/09/1987
- *Present Positions:* Junior Researcher at the University of Lisbon - Portugal
- *Nationality:* Italian
- *Affiliation:* Instituto de Astrofísica e Ciências do Espaço, Faculdade de Ciências da Universidade de Lisboa
- INSPIRE WEBPAGE: <http://inspirehep.net/search?p=exactauthor%3AG.Fanizza.1&sf=earliestdate>
- ArXiv Webpage: https://arxiv.org/search/?query=fanizza%2Cg&searchtype=all&abstracts=hide&order=-announced_date_first&size=50
- OrcID: 0000-0001-5173-3800
- Web of Science ResearcherID: Q-9196-2019

1. **G. Fanizza**, B. Fiorini and G. Marozzi, “*Cosmic variance of H_0 in light of forthcoming high-redshift surveys*”, Phys. Rev. D **104**, no.8, 083506 (2021), arXiv:2102.12419 [astro-ph.CO].
2. **G. Fanizza**, G. Marozzi, M. Medeiros and G. Schiaffino, “*The Cosmological Perturbation Theory on the Geodesic Light-Cone background*”, JCAP **02**, 014 (2021), arXiv:2009.14134 [gr-qc].
3. E. Mitsou, **G. Fanizza**, N. Grimm and J. Yoo, “*Cutting out the cosmological middle man: General Relativity in the light-cone coordinates*”, Class. Quant. Grav. **38** (2021), 055011, arXiv:2009.14687 [gr-qc].
4. **G. Fanizza**, G. Franchini, M. Gasperini and L. Tedesco, “*Comparing the luminosity distance for gravitational waves and electromagnetic signals in a simple model of quadratic gravity*”, Gen. Rel. Grav. **52** (2020) no.11, 111, arXiv:2010.06569 [gr-qc].
5. **G. Fanizza**, M. Gasperini, G. Marozzi and G. Veneziano, “*Generalized covariant prescriptions for averaging cosmological observables*”, JCAP **2002**, 017 (2020), arXiv:1911.09469 [gr-qc].
6. L. Cosmai, **G. Fanizza**, F. Sylos Labini, L. Pietronero and L. Tedesco, “*Fractal universe and cosmic acceleration in a Lemaître-Tolman-Bondi scenario*”, Class. Quant. Grav. **36**, no. 4, 045007 (2019), arXiv:1810.06318 [astro-ph.CO].
7. **G. Fanizza**, J. Yoo and S. G. Biern, “*Non-linear general relativistic effects in the observed redshift*”, JCAP **1809**, 037 (2018), arXiv:1805.05959 [gr-qc].
8. G. Marozzi, **G. Fanizza**, E. Di Dio and R. Durrer, “*Impact of next-to-leading order contributions to CMB lensing*”, Phys. Rev. Lett. **118**, no. 21, 211301 (2017), arXiv:1612.07650 [astro-ph.CO].

9. G. Marozzi, **G. Fanizza**, E. Di Dio and R. Durrer, “*CMB-lensing beyond the Born approximation*”, JCAP **1609**, 028 (2016), arXiv:1605.08761 [astro-ph.CO].
10. P. Fleury, F. Nugier and **G. Fanizza**, “*Geodesic-light-cone coordinates and the Bianchi I spacetime*”, JCAP **1606**, no. 06, 008 (2016), arXiv:1602.04461 [gr-qc].
11. **G. Fanizza** and F. Nugier, “*Lensing in the geodesic light-cone coordinates and its (exact) illustration to an off-center observer in Lemaître-Tolman-Bondi models*”, JCAP **1502**, no. 02, 002 (2015), arXiv:1408.1604 [astro-ph.CO].
12. **G. Fanizza**, M. Gasperini, G. Marozzi and G. Veneziano, “*An exact Jacobi map in the geodesic light-cone gauge*”, JCAP 1311 (2013) **019**, arXiv:1308.4935 [astro-ph.CO].
13. **G. Fanizza** “*Impact of inhomogeneities on cosmological observations*”, PhD thesis.

April 21, 2022

PhD Giuseppe Fanizza



Elenco delle pubblicazioni presentate

1. A. Bernamonti, F. Bigazzi, D. Billo, L. Faggi and F. Galli, “Holographic and QFT complexity with angular momentum,” JHEP **11** (2021), 037 doi:10.1007/JHEP11(2021)037 [arXiv:2108.09281 [hep-th]].
2. A. Bernamonti, F. Galli, J. Hernandez, R. C. Myers, S. M. Ruan and J. Simón, “Aspects of The First Law of Complexity,” J. Phys. A: Math. Theor. **53** (2020), 294002 doi:10.1088/1751-8121/ab8e66 [arXiv:2002.05779 [hep-th]].
3. A. Bernamonti, F. Galli, J. Hernandez, R. C. Myers, S. M. Ruan and J. Simón, “First Law of Holographic Complexity,” Phys. Rev. Lett. **123** (2019) no.8, 081601 doi:10.1103/PhysRevLett.123.081601 [arXiv:1903.04511 [hep-th]].
4. A. Bernamonti, F. Galli, R. C. Myers and J. Oppenheim, “Holographic second laws of black hole thermodynamics,” JHEP **07** (2018) 111 doi:10.1007/JHEP07(2018)111 [arXiv:1803.03633 [hep-th]].
5. A. Bagrov, B. Craps, F. Galli, V. Keränen, E. Keski-Vakkuri and J. Zaanen, “Holography and thermalization in optical pump-probe spectroscopy,” Phys. Rev. D **97** (2018) no.8, 086005 doi:10.1103/PhysRevD.97.086005 [arXiv:1708.08279 [hep-th]].
6. V. Balasubramanian, A. Bernamonti, B. Craps, T. De Jonckheere and F. Galli, “Heavy-Heavy-Light-Light correlators in Liouville theory,” JHEP **08** (2017) 045 doi:10.1007/JHEP08(2017)045 [arXiv:1705.08004 [hep-th]].
7. V. Balasubramanian, A. Bernamonti, B. Craps, T. De Jonckheere and F. Galli, “Entanglement in discretely gauged theories,” JHEP **12** (2016) 094 doi:10.1007/JHEP12(2016)094 [arXiv:1609.03991 [hep-th]].
8. C. T. Asplund, A. Bernamonti, F. Galli and T. Hartman, “Entanglement Scrambling in 2d Conformal Field Theory,” JHEP **09** (2015) 110 doi:10.1007/JHEP09(2015)110 [arXiv:1506.03772 [hep-th]].
9. C. T. Asplund, A. Bernamonti, F. Galli and T. Hartman, “Holographic Entanglement Entropy from 2d CFT: Heavy States and Local Quenches,” JHEP **02** (2015) 171 doi:10.1007/JHEP02(2015)171 [arXiv:1410.1392 [hep-th]].
10. V. Balasubramanian, A. Bernamonti, J. de Boer, B. Craps, L. Franti, F. Galli, E. Keski-Vakkuri, B. Müller and A. Schäfer “Inhomogeneous holographic thermalization,” JHEP **10** (2013) 082 doi:10.1007/JHEP10(2013)082 [arXiv:1307.7086 [hep-th]].

11. V. Balasubramanian, A. Bernamonti, J. de Boer, B. Craps, L. Franti, F. Galli, E. Keski-Vakkuri, B. Müller and A. Schäfer, “Inhomogeneous Thermalization in Strongly Coupled Field Theories,” Phys. Rev. Lett. **111** (2013) 231602 doi:10.1103/PhysRevLett.111.231602 [arXiv:1307.1487 [hep-th]].
12. V. Balasubramanian, A. Bernamonti, N. Copland, B. Craps and F. Galli, “Thermalization of mutual and tripartite information in strongly coupled two dimensional conformal field theories,” Phys. Rev. D **84** (2011) 105017 doi:10.1103/PhysRevD.84.105017 [arXiv:1110.0488 [hep-th]].

Firenze, 18 aprile 2022

Federico Galli

Federico Galli

Elenco pubblicazioni presentate

1. D. Barducci, E. Bertuzzo, G. Grilli di Cortona, G. M. Salla, *Dark Photon bounds in the dark EFT*, **JHEP** **12** (2021) **081**, arXiv:2109.04852;
2. G. Grilli di Cortona, A. Messina, S. Piacentini, *Migdal effect: improving the sensitivity to light dark matter with liquid argon*, **JHEP** **11** (2020) **034**, arXiv:2006.02453, **cited by 17**;
3. M. Badziak, G. Grilli di Cortona, K. Harigaya, *Natural Twin Neutralino Dark Matter*, **Phys. Rev. Lett.** **124** (2020) **no.12**, **121803**, arXiv:1911.03481 [hep-ph], **cited by 8**;
4. A. Alves, O. Eboli, G. Grilli di Cortona, R. Moreira, *Indirect and monojet constraints on scalar leptoquarks*, **Phys. Rev. D** **99** (2019) **no.9**, **09005**, arXiv:1812.08632 [hep-ph], **cited by 14**;
5. H. Beauchesne, E. Bertuzzo, G. Grilli di Cortona, *Dark Matter in Hidden Valley models with stable and unstable dark mesons*, **JHEP** **1904** (2019) **118**, arXiv:1809.10152 [hep-ph], **cited by 16**;
6. A. Belyaev, E. Bertuzzo, C. Caniu Barros, O. Eboli, G. Grilli di Cortona, F. Iocco, *Interplay of the LHC and non-LHC Dark Matter searches in the Effective Field Theory approach*, **Phys. Rev. D** **99** (2019) **no.1**, **015006**, arXiv:1807.03817 [hep-ph], **cited by 21**;
7. A. Falkowski, G. Grilli di Cortona, Z. Tabrizi, *Future DUNE constraints on EFT*, **JHEP** **1804** (2018) **101**, arXiv:1802.08296 [hep-ph], **cited by 18**;
8. H. Beauchesne, E. Bertuzzo, G. Grilli di Cortona, Z. Tabrizi, *Collider phenomenology of Hidden Valley mediators of spin 0 or 1/2 with semivisible jets*, arXiv:1712.07160 [hep-ph], **JHEP** **1808** (2018) **030**, **cited by 17**;
9. E. Bertuzzo, C. Caniu Barros, G. Grilli di Cortona, *MeV dark matter: model independent bounds*, **JHEP** **1709** (2017) **116**, arXiv:1705.06325 [hep-ph] , **cited by 23**
10. H. Beauchesne, E. Bertuzzo, G. Grilli di Cortona, *Constraints on the relaxation mechanism with strongly interacting vector-fermions*, **JHEP** **1708** (2017) **093**, arXiv:1705.06325 [hep-ph] , **cited by 15**;
11. G. Grilli di Cortona, E. Hardy, J. Pardo Vega and G. Villadoro, *The QCD axion, precisely*, **JHEP** **1601** (2016) **034**, arXiv:1511.02867 [hep-ph], **cited by 312**;
12. G. Grilli di Cortona, *Hunting electroweakinos at future hadron colliders and direct detection experiments*, **JHEP** **1505** (2015) **035**, arXiv:1412.5952, **cited by 24**;

Luogo e data
Frascati, 20/04/2022

Il dichiarante

Giuseppe Grilli di Cortona

NOTA: i criteri adottati dal candidato per la scelta delle pubblicazioni presentate non sono necessariamente né il rango della rivista né il numero di citazioni. Invece, si è cercato di fornire una panoramica il più possibile organica dell'attività di ricerca del candidato, specie in funzione delle richieste del bando.

La numerazione delle pubblicazioni presentate si riferisce alla lista totale (nel CV).

- [2] A. Di Giacomo, L. Lepori, and F. Pucci (alphabetic order adopted for the list of authors), "Homotopy, monopoles and 't Hooft tensor in QCD with generic gauge group", JHEP **0810** 096 (2008).
<http://iopscience.iop.org/article/10.1088/1126-6708/2008/10/096>
- [5] C. Bonati, A. Di Giacomo, L. Lepori, and F. Pucci (alphabetic order adopted for the list of authors), "Monopoles, abelian projection and gauge invariance", Phys. Rev. D. **81**, 0805022 (2010).
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.81.0805022>
- [8] G. De Chiara, L. Lepori, M. Lewenstein, and A. Sanpera, "Entanglement Spectrum, Critical Exponents and Order Parameters in Quantum Spin Chains", Phys. Rev. Lett. **109**, 237208 (2012). <https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.109.237208>
- [10] L. Lepori, G. De Chiara, and A. Sanpera, "Scaling of the entanglement spectrum near quantum phase transitions", Phys. Rev. B **87** 235107 (2013).
<https://journals.aps.org/prb/abstract/10.1103/PhysRevB.87.235107>
- [13] D. Vodola, L. Lepori, E. Ercolessi, A. V. Gorshkov, and G. Pupillo, "Kitaev chains with long-range pairing", Phys. Rev. Lett. **113**, 156402 (2014).
<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.113.156402>
- [17] L. Lepori, D. Vodola, G. Pupillo, G. Gori, and A. Trombettoni, "Effective theories and breakdown of conformal symmetry in an long-range quantum chain", Ann. Phys. **374** 35-66 (2016).
<https://www.sciencedirect.com/science/article/pii/S0003491616301270>
- [23] S. Carignano, L. Lepori, A. Mammarella, M. Mannarelli, and G. Pagliaroli, "Scrutinizing the pion condensed phase", Eur. Phys. Journ. A **53** 35 (2017).
<https://link.springer.com/article/10.1140%2Fepja%2Fi2017-12221-x>
- [24] L. Lepori and L. Dell'Anna, "Long-range topological insulators and weakened bulk-boundary correspondence", New Journ. Phys. **19**, 103030 (2017).
<http://iopscience.iop.org/article/10.1088/1367-2630/aa84d0>
- [26] L. Pezzé, M. Gabbriellini, L. Lepori, and A. Smerzi, "Multipartite entanglement in topological quantum phases", Phys. Rev. Lett. **119**, 250401 (2017).
<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.119.250401>
- [34] L. Lepori, M. Burrello, and E. Guadagnini, "Axial anomaly in multi-Weyl and triple-point semimetals", J. High En. Phys. (2018) 110.
[https://doi.org/10.1007/JHEP06\(2018\)110](https://doi.org/10.1007/JHEP06(2018)110)

- [35] M. Gabbrielli*, L. Lepori*, and L. Pezzé, "Multipartite-Entanglement Tomography of a Quantum Simulator", New J. Phys. **21** (2019) 033039.
<https://doi.org/10.1088/1367-2630/aafb8c>
*: these authors contributed equally to the present paper.
- [36] L. Lepori and M. Mannarelli, "Multicomponent meson superfluids in chiral perturbation theory", Phys. Rev. D **99**, 096011 (2019).
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.99.096011>

List of the twelve publications presented by **Orlando Luongo**

- 1) Alejandro Aviles, Christine Gruber, **Orlando Luongo**, Hernando Quevedo,
"Cosmography and constraints on the equation of state of the Universe in various parametrizations",
ArXiv[astro-ph]:1204.2007
DOI: 10.1103/PhysRevD.86.123516
Physical Review D, **86**, 123516, 23 pages, (2012).
- 2) Alejandro Aviles, Alessandro Bravetti, Salvatore Capozziello, **Orlando Luongo**,
"Updated constraints on $f(R)$ gravity from cosmography",
ArXiv[gr-qc]:1210.5149
DOI: 10.1103/PhysRevD.87.044012
Physical Review D, **87**, 044012, 11 pages, (2013).
- 3) Alejandro Aviles, Alessandro Bravetti, Salvatore Capozziello, **Orlando Luongo**,
"Cosmographic reconstruction of $f(T)$ cosmology",
ArXiv[gr-qc]:1302.4871
DOI: 10.1103/PhysRevD.87.064025
Physical Review D, **87**, 064025, 10 pages, (2013).
- 4) **Orlando Luongo**,
"Dark energy from a positive jerk parameter",
DOI: 10.1142/S0217732313500806
Modern Physics Letters A, **28**, 19, 1350080, 9 pages, (2013).
- 5) Salvatore Capozziello, Omer Farooq, **Orlando Luongo**, Bharat Ratra,
"Cosmographic bounds on the cosmological deceleration-acceleration transition redshift in $f(R)$ gravity",
ArXiv[gr-qc]:1403.1421
DOI: 10.1103/PhysRevD.90.044016
Physical Review D, **90**, 044016, 11 pages, (2014).
- 6) Christine Gruber, **Orlando Luongo**,
"Cosmographic analysis of the equation of state of the universe through Padé approximations",
ArXiv[gr-qc]:1309.3215
DOI: 10.1103/PhysRevD.89.103506
Physical Review D, **89**, 103506, 19 pages, (2014).
- 7) **Orlando Luongo**, Hernando Quevedo,
"Characterizing repulsive gravity with curvature eigenvalues",
ArXiv[gr-qc]:1407.1530

DOI: 10.1103/PhysRevD.90.084032

Physical Review D, **90**, 084032, 9 pages, (2014).

- 8) Salvatore Capozziello, **Orlando Luongo**, Emmanuel N. Saridakis,
"Transition redshift in $f(T)$ cosmology and observational constraints",
ArXiv[gr-qc]:1503.02832

DOI: 10.1103/PhysRevD.91.124037

Physical Review D, **91**, 124037, 11 pages, (2015).

- 9) Rocco D'Agostino, **Orlando Luongo**,
"Growth of matter perturbations in nonminimal teleparallel dark energy",
ArXiv[gr-qc]:1807.10167

DOI: 10.1103/PhysRevD.98.124013

Physical Review D, **98**, 124013, 14 pages, (2018).

- 10) **Orlando Luongo**, Marco Muccino,
"Speeding up the Universe using dust with pressure",
ArXiv[gr-qc]:1807.00180

DOI: 10.1103/PhysRevD.98.103520

Physical Review D, **98**, 103520, 12 pages, (2018).

- 11) Salvatore Capozziello, Rocco D'Agostino, **Orlando Luongo**,
"Cosmographic analysis with Chebyshev polynomials",
ArXiv[astro-ph]:1712.04380

DOI: 10.1093/mnras/sty422

Monthly Notices of the Royal Astronomical Society, **476**, 3, 3924, 15 pages, (2018).

- 12) Salvatore Capozziello, Rocco D'Agostino, **Orlando Luongo**,
"Extended gravity cosmography",

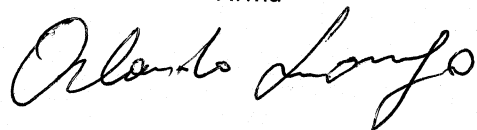
ArXiv[gr-qc]:1904.01427,

DOI: 10.1142/S0218271819300167

(Invited review) International Journal of Modern Physics D, **28**, 10, 1930016, 81 pages, (2019).

Camerino, 08/04/2022

Firma



Valerio MARRA – Selected Publications

April 11, 2022



- [1] H. Leandro, V. Marra, and R. Sturani, *Measuring the Hubble constant with black sirens*, [Phys.Rev. **D105** \(2022\) 023523](#), [arXiv:2109.07537 \[gr-qc\]](#).
- [2] D. Camarena, V. Marra, Z. Sakr, and C. Clarkson, *The Copernican principle in light of the latest cosmological data*, [Mon. Not. Roy. Astron. Soc. **509** \(2022\) 1291–1302](#), [arXiv:2107.02296 \[astro-ph.CO\]](#).
- [3] V. Marra and L. Perivolaropoulos, *A rapid transition of G_{eff} at $z_t \simeq 0.01$ as a solution of the Hubble and growth tensions*, [Phys.Rev. **D104** \(2021\) L021303](#), [arXiv:2102.06012 \[astro-ph.CO\]](#).
- [4] D. Camarena and V. Marra, *On the use of the local prior on the absolute magnitude of Type Ia supernovae in cosmological inference*, [Mon. Not. Roy. Astron. Soc. **504** \(2021\) 5164–5171](#), [arXiv:2101.08641 \[astro-ph.CO\]](#).
- [5] D. Camarena and V. Marra, *Local determination of the Hubble constant and the deceleration parameter*, [Phys.Rev.Res. **2** \(2020\) no. 1, 013028](#), [arXiv:1906.11814 \[astro-ph.CO\]](#).
- [6] D. Camarena and V. Marra, *A new method to build the (inverse) distance ladder*, [Mon. Not. Roy. Astron. Soc. **495** \(2020\) 2630–2644](#), [arXiv:1910.14125 \[astro-ph.CO\]](#).
- [7] D. C. Rodrigues, V. Marra, A. del Popolo, and Z. Davari, *Absence of a fundamental acceleration scale in galaxies*, [Nat. Astron. **2** \(2018\) 668–672](#), [arXiv:1806.06803 \[astro-ph.GA\]](#).
- [8] V. Marra and D. Sapone, *Null tests of the standard model using the linear model formalism*, [Phys.Rev. **D97** \(2018\) no. 8, 083510](#), [arXiv:1712.09676 \[astro-ph.CO\]](#).
- [9] R. C. Batista and V. Marra, *Clustering dark energy and halo abundances*, [JCAP **11** \(2017\) 048](#), [arXiv:1709.03420 \[astro-ph.CO\]](#).
- [10] V. Marra, L. Amendola, I. Sawicki, and W. Valkenburg, *Cosmic Variance and the Measurement of the Local Hubble Parameter*, [Phys.Rev.Lett. **110** \(2013\) 241305](#), [arXiv:1303.3121 \[astro-ph.CO\]](#).
- [11] K. Kainulainen and V. Marra, *Accurate modeling of weak lensing with the stochastic gravitational lensing method*, [Phys.Rev. **D83** \(2011\) 023009](#), [arXiv:1011.0732 \[astro-ph.CO\]](#).
- [12] L. Amendola, K. Kainulainen, V. Marra, and M. Quartin, *Large-Scale Inhomogeneities May Improve the Cosmic Concordance of Supernovae*, [Phys.Rev.Lett. **105** \(2010\) 121302](#), [arXiv:1002.1232 \[astro-ph.CO\]](#).

Elenco delle pubblicazioni presentate

1. *Symplectic Deformations of Gauged Maximal Supergravity*, G. Dall'Agata, G. Inverso, A. Marrani, JHEP **1407** (2014) 133, [arXiv:1405.2437 \[hep-th\]](#), DOI: 10.1007/JHEP07(2014)133.
2. *Are all supergravity theories Yang-Mills squared?*, A. Anastasiou, L. Borsten, M.J. Duff, A. Marrani, S. Nagy, M. Zoccali, Nucl. Phys. **B934** (2018) 606-633, [arXiv:1707.03234 \[hep-th\]](#), DOI: 10.1016/j.nuclphysb.2018.07.023.
3. *Nonlinear symmetries of black hole entropy in gauged supergravity*, D. Klemm, A. Marrani, N. Petri, M. Rabbiosi, JHEP **04** (2017) 013, [arXiv: 1701.08536 \[hep-th\]](#), DOI: 10.1007/JHEP04(2017)013.
4. *$D = 3$ Unification of Curious Supergravities*, M. J. Duff, S. Ferrara, A. Marrani, JHEP **01** (2017) 023, [arXiv: 1610.08800 \[hep-th\]](#), DOI: 10.1007/JHEP01(2017)023.
5. *Supersymmetric Black Holes and Freudenthal Duality*, A. Marrani, P. K. Tripathy, T. Mandal, Int. J. Mod. Phys. **A32** (2017) 19n20, 1750114, [arXiv: 1703.08669 \[hep-th\]](#), DOI: 10.1142/S0217751X17501147.
6. *A Kind of Magic*, L. Borsten, A. Marrani, Class. Quant. Grav. **34** (2017) 23, 235014, [arXiv:1707.02072 \[hep-th\]](#), DOI: 10.1088/1361-6382/aa8fe2.
7. *Black holes and general Freudenthal transformations*, L. Borsten, M.J. Duff, J.J. Fernández-Melgarejo, A. Marrani, E. Torrente-Lujan, JHEP **07** (2019) 070, [arXiv: 1905.00038 \[hep-th\]](#), DOI: 10.1007/JHEP07(2019)070.
8. *One-Dimensional Super Calabi-Yau Manifolds and their Mirrors*, S. Noja, S. L. Cacciatori, F. Dalla Piazza, A. Marrani, R. Re, JHEP **04** (2017) 094, [arXiv: 1609.03801 \[hep-th\]](#), DOI: 10.1007/JHEP04(2017)094.
9. *Twin conformal field theories*, L. Borsten, M.J. Duff, A. Marrani, JHEP **03** (2019) 112, [arXiv: 1812.11130 \[hep-th\]](#), DOI: 10.1007/JHEP03(2019)112.
10. *Klein and Conformal Superspaces, Split Algebras and Spinor Orbits*, R. Fiorese, E. Latini, A. Marrani, Rev. Math. Phys. **29** (2017) 0011, [arXiv: 1603.09063 \[hep-th\]](#), DOI: 10.1142/S0129055X17500118.
11. *Lagrangian Grassmannians and Spinor Varieties in Characteristic Two*, B. van Geemen, A. Marrani, Symmetry, Integrability and Geometry: Methods and Applications (SIGMA) **15** (2019), 064, 22 pages, [arXiv:1903.01228 \[math-ph\]](#), DOI: <https://doi.org/10.3842/SIGMA.2019.064>.
12. *On Generalized Lemaitre-Tolman-Bondi Metric. Fractal Matter at the end of Matter-Antimatter Recombination*, S. L. Cacciatori, A. Marrani, F. Re, Int. J. Mod. Phys. **D30**, No. 11, 2150086 (2021), [arXiv: 2011.11086 \[gr-qc\]](#), DOI:10.1142/S0218271821500863.

Lista delle 12 Pubblicazioni presentate ai fini della procedura selettiva

Alessio Notari

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (art 46 del D.P.R. n.445 del 28/12/2000)

DICHIARAZIONE SOSTITUTIVA DELL'ATTO DI NOTORIETA' (artt. 47 del D.P.R. n.445 del 28/12/2000)

Il sottoscritto

Cognome: Notari, Nome: Alessio.

Codice fiscale NTRLSS79L06H282C nato a RIETI Prov. RI il 07/07/1979 residente a Saccolongro Prov. PD, indirizzo via Vallona 3/A C.A.P. 35030, Telefono 3935355366

consapevole delle sanzioni penali, nel caso di dichiarazioni non veritiere e falsità negli atti, richiamate dall'art. 76 del D.P.R. 445/2000 e dalle leggi speciali in materia

DICHIARA SOTTO LA PROPRIA RESPONSABILITÀ

(artt. 46 e 47 del D.P.R. 28.12.2000, n. 445: esto Unico delle disposizioni legislative e regolamentari in materia di documentazione amministrativa concernenti le dichiarazioni sostitutive di certificazione e le dichiarazioni sostitutive dell'atto di notorietà)

di presentare le seguenti 12 pubblicazioni scientifiche:

1. **"The H_0 tension: ΔG_N vs. ΔN_{eff} "**
G. Ballesteros, A. Notari and F. Rompineve.
JCAP 11 (2020) 024
<https://iopscience.iop.org/article/10.1088/1475-7516/2020/11/024>
2. **"Hot Axions and the H_0 tension"**
F. D'Eramo, R. Z. Ferreira, A. Notari and J. L. Bernal.
arXiv:1808.07430 [hep-ph]
DOI:10.1088/1475-7516/2018/11/014
JCAP **1811**, 014 (2018)
3. **"Observable windows for the QCD axion through the number of relativistic species"**
R. Z. Ferreira and A. Notari.
arXiv:1801.06090 [hep-ph]
DOI:10.1103/PhysRevLett.120.191301
Phys. Rev. Lett. **120**, no. 19, 191301 (2018)
4. **"Thermalized Axion Inflation"**
R. Z. Ferreira and A. Notari.

arXiv:1706.00373 [astro-ph.CO]
DOI:10.1088/1475-7516/2017/09/007
JCAP **1709**, no. 09, 007 (2017)

5. **“On the significance of power asymmetries in Planck CMB data at all scales”**
M. Quartin and A. Notari.
arXiv:1408.5792 [astro-ph.CO]
DOI:10.1088/1475-7516/2015/01/008
JCAP **1501**, no. 01, 008 (2015)
6. **“Standard Model False Vacuum Inflation: Correlating the Tensor-to-Scalar Ratio to the Top Quark and Higgs Boson masses”**
I. Masina and A. Notari.
arXiv:1112.5430 [hep-ph]
DOI:10.1103/PhysRevLett.108.191302
Phys. Rev. Lett. **108**, 191302 (2012)
7. **“The Higgs mass range from Standard Model false vacuum Inflation in scalar-tensor gravity”**
I. Masina and A. Notari.
arXiv:1112.2659 [hep-ph]
DOI:10.1103/PhysRevD.85.123506
Phys. Rev. D **85**, 123506 (2012)
8. **“Measuring our peculiar velocity on the CMB with high-multipole off-diagonal correlations”**
L. Amendola, R. Catena, I. Masina, A. Notari, M. Quartin and C. Quercellini.
arXiv:1008.1183 [astro-ph.CO]
DOI:10.1088/1475-7516/2011/07/027
JCAP **1107**, 027 (2011)
9. **“Swiss-Cheese Inhomogeneous Cosmology and the Dark Energy Problem”**
T. Biswas and A. Notari.
astro-ph/0702555
DOI:10.1088/1475-7516/2008/06/021
JCAP **0806**, 021 (2008)
IGPG-07-2-2
10. **“Can inflation solve the hierarchy problem?”**
T. Biswas and A. Notari.
hep-ph/0511207
DOI:10.1103/PhysRevD.74.043508
Phys. Rev. D **74**, 043508 (2006)
11. **“Constraints on neutrino masses from leptogenesis models”**
T. Hambye, Y. Lin, A. Notari, M. Papucci and A. Strumia.

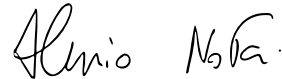
hep-ph/0312203
DOI:10.1016/j.nuclphysb.2004.06.027
Nucl. Phys. B **695**, 169 (2004)
IFUP-TH-2003-48

12. **“Towards a complete theory of thermal leptogenesis in the SM and MSSM”**

G. F. Giudice, A. Notari, M. Raidal, A. Riotto and A. Strumia.
hep-ph/0310123
DOI:10.1016/j.nuclphysb.2004.02.019
Nucl. Phys. B **685**, 89 (2004)
IFUP-TH-2003-37, CERN-TH-2003-240

DICHIARA, INOLTRE, DI ESSERE CONSAPEVOLE che chiunque rilascia dichiarazioni mendaci, forma atti falsi o ne fa uso è punito ai sensi de Codice Penale; che l'esibizione di un atto contenente dati non più corrispondenti a verità equivale ad uso di atto falso, ai sensi dell'art. 76 de D.P.R. 28.12.2000, n. 445; che qualora emerga la non veridicità del contenuto delle dichiarazioni rilasciate, il dichiarante decade dai benefici eventualmente conseguenti al provvedimento emanato sulla base della dichiarazione non veritiera, ai sensi dell'art. 75 del D.P.R. 28.12.2000, n. 445:

Luogo e data: Saccolongo, 07/09/2021 firma



Elenco delle pubblicazioni selezionate

Carlo Pagani

*Institut für Physik (WA THEP), Johannes-Gutenberg-Universität
Staudingerweg 7, 55099 Mainz (Germania)*

Di seguito è riportato l'elenco delle pubblicazioni selezionate ai fini della procedura.

Articoli

1. C. Pagani e L. Canet,
“*Spatio-temporal correlation functions in scalar turbulence from functional renormalization group*”,
Phys. Fluids 33 (2021) 065109, [arXiv:2103.07326](#).
2. C. Pagani e H. Sonoda,
“*Operator product expansion coefficients in the exact renormalization group formalism*”,
Phys. Rev. D 101 (2020) 105007, [arXiv:2001.07015](#).
3. M. Becker, C. Pagani e O. Zanusso,
“*Fractal Geometry of Higher Derivative Gravity*”,
Phys. Rev. Lett. 124 (2020) 151302, [arXiv:1911.02415](#).
4. C. Pagani e M. Reuter,
“*Background Independent Quantum Field Theory and Gravitating Vacuum Fluctuations*”,
Annals Phys. 411 (2019) 167972, [arXiv:1906.02507](#).
5. M. Becker e C. Pagani,
“*Geometric Operators in the asymptotic safety scenario for quantum gravity*”,
Phys. Rev. D 99 (2019) 066002, [arXiv:1810.11816](#).
6. C. Pagani e M. Reuter,
“*Finite Entanglement Entropy in Asymptotically Safe Quantum Gravity*”,
JHEP 1807 (2018) 039, [arXiv:1804.02162](#).
7. C. Pagani e M. Reuter,
“*Composite operators in Asymptotic Safety*”,
Phys. Rev. D 95 (2017) 066002, [arXiv:1611.06522](#).
8. C. Pagani and R. Percacci,
“*Quantum gravity with torsion and non-metricity*”,
Class. Quant. Grav. 32 (2015) 195019, [arXiv:1506.02882](#).

9. C. Pagani,
“*Functional Renormalization Group approach to the Kraichnan model*”,
Phys. Rev. E 92 (2015) 033016, Add.: Phys. Rev. E 97 (2018) 049902, [arXiv:1505.01293](#).
10. C. Pagani e R. Percacci,
“*Quantization and fixed points of non-integrable Weyl theory*”,
Class.Quant.Grav. 31 (2014) 115005, [arXiv:1312.7767](#).
11. A. Codello, G. D’Odorico e C. Pagani,
“*Consistent closure of renormalization group flow equations in quantum gravity*”,
Phys. Rev. D(R) 89 (2014) 081701, [arXiv:1304.4777](#).
12. A. Codello, G. D’Odorico, C. Pagani e R. Percacci,
“*The Renormalization Group and Weyl-invariance*”,
Class. Quant. Grav. 30 (2013) 115015, [arXiv:1210.3284](#).

19 aprile 2022

Il sottoscritto



Elenco numerato e firmato delle pubblicazioni scientifiche
presentate

1. A. Pini and D. Rodriguez-Gomez, “*Gauge/gravity duality and RG flows in 5d gauge theories*,” Nucl. Phys. B **884** (2014) 612 [arXiv:1402.6155 [hep-th]].
2. A. Pini, D. Rodriguez-Gomez and J. Schmude, “*Rigid Supersymmetry from Conformal Supergravity in Five Dimensions*,” JHEP **1509**, 118 (2015) [arXiv:1504.04340 [hep-th]].
3. A. Pini, D. Rodriguez-Gomez and J. G. Russo, “Large N correlation functions $\mathcal{N} = 2$ superconformal quivers,” JHEP **1708** (2017) 066, [arXiv:1701.02315 [hep-th]].
4. A. Bourget and A. Pini, “*Non-Connected Gauge Groups and the Plethystic Program*,” JHEP **1710** (2017) 033 arXiv:1706.03781 [hep-th].
5. A. Bourget, A. Pini and D. Rodriguez-Gomez, “*Towards Deconstruction of the Type D (2,0) Theory*,” JHEP **1712**, 146 (2017).
6. A. Bourget, A. Pini and D. Rodriguez-Gomez, “*Gauge theories from principally extended disconnected gauge groups*,” Nucl. Phys. B **940** (2019) 351 [arXiv:1804.01108 [hep-th]].
7. T. Bourton, A. Pini and E. Pomoni, “4d $\mathcal{N} = 3$ indices via discrete gauging,” JHEP **1810** (2018) 131 [arXiv:1804.05396 [hep-th]].
8. G. Arias-Tamargo, A. Bourget, A. Pini and D. Rodriguez-Gomez, “*Discrete gauge theories of charge conjugation*,” Nucl. Phys. B **946** (2019) 114721 arXiv:1903.06662 [hep-th].
9. V. Niarchos, C. Papageorgakis, A. Pini and E. Pomoni, “(Mis-)Matching Type-B Anomalies on the Higgs Branch,” JHEP **01** (2021), 106 [arXiv:2009.08375 [hep-th]].
10. T. Bourton, A. Pini and E. Pomoni, “The Coulomb and Higgs branches of $\mathcal{N} = 1$ theories of Class $\mathcal{S}_k$,” JHEP **02** (2021), 137 [arXiv:2011.01587 [hep-th]].
11. G. Arias-Tamargo, A. Bourget and A. Pini, “Discrete gauging and Hasse diagrams,” SciPost Phys. **11** (2021) no.2, 026 [arXiv:2105.08755 [hep-th]].

Alessandro Pini

12. M. Beccaria, M. Billò, M. Frau, A. Lerda and A. Pini, “Exact results in a $\mathcal{N} = 2$ superconformal gauge theory at strong coupling,” JHEP **07** (2021), [arXiv:2105.15113 [hep-th]].

ELENCO PUBBLICAZIONI PRESENTATE

1. A. Casalino and L. Sebastiani, “Perturbations in Regularized Lovelock Gravity,” Phys. Dark Univ. **31** (2021), 100771 [arXiv:2004.10229 [gr-qc]].
2. A. Casalino, M. Rinaldi, L. Sebastiani and S. Vagnozzi, “Alive and well: mimetic gravity and a higher-order extension in light of GW170817,” Class. Quant. Grav. **36**, no. 1, 017001 (2019) [arXiv:1811.06830 [gr-qc]];
3. L. Sebastiani, L. Vanzo and S. Zerbini, “Action growth for black holes in modified gravity,” Phys. Rev. D **97** (2018) no.4, 044009 [arXiv:1710.05686 [hep-th]];
4. S. D. Odintsov, V. K. Oikonomou and L. Sebastiani, “Unification of Constant-roll Inflation and Dark Energy with Logarithmic R^2 -corrected and Exponential $F(R)$ Gravity,” Nucl. Phys. B **923** (2017) 608 [arXiv:1708.08346 [gr-qc]];
5. R. Myrzakulov, L. Sebastiani, S. Vagnozzi and S. Zerbini, “Static spherically symmetric solutions in mimetic gravity: rotation curves & wormholes,” Class. Quant. Grav. **33**, 12 (2016) [arXiv:1510.02284 [gr-qc]];
6. R. Myrzakulov, S. Odintsov and L. Sebastiani, “Inflationary universe from higher-derivative quantum gravity,” Phys. Rev. D **91** (2015) no.8, 083529 [arXiv:1412.1073 [gr-qc]];
7. L. Sebastiani, G. Cognola, R. Myrzakulov, S. D. Odintsov and S. Zerbini, “Nearly Starobinsky inflation from modified gravity,” Phys. Rev. D **89**, 023518 (2014) [arXiv:1311.0744 [gr-qc]];
8. L. Sebastiani, D. Momeni, R. Myrzakulov and S. D. Odintsov, “The instabilities and (anti)-evaporation of Schwarzschild-de Sitter black holes in modified gravity,” Phys. Rev. D. **88** 104022 (2013) arXiv:1305.4231 [gr-qc];
9. G. Cognola, R. Myrzakulov, L. Sebastiani and S. Zerbini, “Einstein gravity with Gauss-Bonnet entropic corrections,” Phys. Rev. D **88** (2013) no.2, 024006 [arXiv:1304.1878 [gr-qc]];
10. G. Cognola, O. Gorbunova, L. Sebastiani and S. Zerbini, “On the Energy Issue for a Class of Modified Higher Order Gravity Black Hole Solutions,” Phys. Rev. D **84** (2011), 023515 [arXiv:1104.2814 [gr-qc]].
11. L. Sebastiani and S. Zerbini, “Static Spherically Symmetric Solutions in $F(R)$ Gravity,” Eur. Phys. J. C **71** (2011), 1591 [arXiv:1012.5230 [gr-qc]].
12. G. Cognola, E. Elizalde, S. Nojiri, S. D. Odintsov, L. Sebastiani and S. Zerbini, “A Class of viable modified $f(R)$ gravities describing inflation and the onset of accelerated expansion,” Phys. Rev. D **77** (2008), 046009 [arXiv:0712.4017 [hep-th]].



12 Pubblicazioni scelte ai fini della procedura

1. A. Codello, M. Safari, G. P. Vacca, O. Zanusso
On critical models with $N \leq 4$ scalars in $d = 4 - \epsilon$
Phys. Rev. D 102, 065017 (2020)
2. O. Zanusso, L. Zambelli, G. P. Vacca, R. Percacci
Gravitational corrections to Yukawa systems
Phys. Lett. B 689, 90-94 (2010)
3. M. Demmel, F. Saueressig, O. Zanusso
A proper fixed functional for four-dimensional Quantum Einstein Gravity
JHEP 1508 (2015) 113
4. G. P. Vacca, O. Zanusso
Asymptotic Safety in Einstein Gravity and Scalar-Fermion Matter
Phys. Rev. Lett. 105, 231601 (2010)
5. M. Becker, C. Pagani, O. Zanusso
Fractal geometry of higher derivative gravity
Phys. Rev. Lett. 124 (2020) no.15, 151302
6. A. Codello, M. Demmel and O. Zanusso,
Scheme dependence and universality in the functional renormalization group
Phys. Rev. D 90 (2014) no.2, 027701
7. R. Percacci, O. Zanusso
One loop beta functions and fixed points in Higher Derivative Sigma Models
Phys. Rev. D 81, 065012 (2010)
8. R. Martini, A. Ugolotti, F. Del Porro and O. Zanusso
Gravity in $d = 2 + \epsilon$ dimensions and realizations of the diffeomorphisms group
Eur. Phys. J. C 81 (2021) no.10, 916
9. A. Codello, O. Zanusso
On the non-local heat kernel expansion
J. Math. Phys. 54, 013513 (2013)
10. A. Codello, M. Safari, G. P. Vacca, O. Zanusso
Functional perturbative RG and CFT data in the ϵ -expansion
Eur. Phys. J. C 78, 30 (2018)
11. N. Brouzakis, A. Codello, N. Tetradis, O. Zanusso
Quantum corrections in Galileon theories
Phys. Rev. D 89, 125017 (2014)
12. A. Codello, M. Safari, G. P. Vacca, O. Zanusso
Leading CFT constraints on multi-critical models in $d > 2$
JHEP 1704 (2017) 127

San Giuliano Terme, 11 febbraio 2022