

# Germán Rodrigo

## List of Publications by Year in descending order

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113  
papers

4,854  
citations

87888

38  
h-index

91884

69  
g-index

113  
all docs

113  
docs citations

113  
times ranked

5525  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interplay between the loop-tree duality and helicity amplitudes. Physical Review D, 2022, 105, .	4.7	5
2	$\langle m \rangle$ at $m$ : The Running Bottom Quark Mass and the Higgs Boson. Physical Review Letters, 2022, 128, 122001.	7.8	5
3	Quantum algorithm for Feynman loop integrals. Journal of High Energy Physics, 2022, 2022, .	4.7	7
4	Causal representation of multi-loop Feynman integrands within the loop-tree duality. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
5	Mathematical properties of nested residues and their application to multi-loop scattering amplitudes. Journal of High Energy Physics, 2021, 2021, 1.	4.7	20
6	May the four be with you: novel IR-subtraction methods to tackle NNLO calculations. European Physical Journal C, 2021, 81, 1.	3.9	40
7	Asymptotic expansions through the loop-tree duality. European Physical Journal C, 2021, 81, 1.	3.9	10
8	Universal opening of four-loop scattering amplitudes to trees. Journal of High Energy Physics, 2021, 2021, 1.	4.7	13
9	A Stroll through the Loop-Tree Duality. Symmetry, 2021, 13, 1029.	2.2	14
10	Open Loop Amplitudes and Causality to All Orders and Powers from the Loop-Tree Duality. Physical Review Letters, 2020, 124, 211602.	7.8	34
11	FCC-hh: The Hadron Collider. European Physical Journal: Special Topics, 2019, 228, 755-1107.	2.6	367
12	HE-LHC: The High-Energy Large Hadron Collider. European Physical Journal: Special Topics, 2019, 228, 1109-1382.	2.6	108
13	FCC-ee: The Lepton Collider. European Physical Journal: Special Topics, 2019, 228, 261-623.	2.6	424
14	FCC Physics Opportunities. European Physical Journal C, 2019, 79, 1.	3.9	346
15	Universal four-dimensional representation of $H \hat{\alpha}^{\prime} \hat{\beta}^3$ at two loops through the Loop-Tree Duality. Journal of High Energy Physics, 2019, 2019, 1.	4.7	29
16	Causality, unitarity thresholds, anomalous thresholds and infrared singularities from the loop-tree duality at higher orders. Journal of High Energy Physics, 2019, 2019, 1.	4.7	26
17	Standard model radiative corrections in the pion form factor measurements do not explain the $\frac{1}{4}$ anomaly. Physical Review D, 2019, 100, .	4.7	30
18	Universal dual amplitudes and asymptotic expansions for $H \hat{\alpha}^{\prime} H$ and $\gamma \gamma$ . European Physical Journal C, 2018, 78, 1.	3.9	24

#	ARTICLE	IF	CITATIONS
19	On the universal structure of Higgs amplitudes mediated by heavy particles. , 2018, , .		0
20	Recent developments from the loop-tree duality. , 2018, , .		0
21	Loop-tree duality at two loops. , 2018, , .		0
22	Numerical implementation of the loop-tree duality method. European Physical Journal C, 2017, 77, 1.	3.9	39
23	To $\mathcal{D}$ , or not to $\mathcal{D}$ : recent developments and comparisons of regularization schemes. European Physical Journal C, 2017, 77, 471.	3.9	88
24	From Jacobi off-shell currents to integral relations. Journal of High Energy Physics, 2017, 2017, 1.	4.7	17
25	QED and QCD self-energy corrections through the loop-tree duality. Journal of Physics: Conference Series, 2017, 912, 012013.	0.4	0
26	New Developments with the Loop-tree Duality. Acta Physica Polonica B, 2017, 48, 2305.	0.8	0
27	Towards regularized higher-order computations in QFT without DREG. , 2017, , .		0
28	Mixed QCD-QED corrections to DGLAP equations. , 2017, , .		2
29	The Loop-Tree Duality: Progress Report. , 2017, , .		1
30	Four-dimensional regularization of higher-order computations: FDU approach. , 2017, , .		0
31	Two-loop QED corrections to the Altarelli-Parisi splitting functions. Journal of High Energy Physics, 2016, 2016, 1.	4.7	30
32	NLO cross sections in 4 dimensions without DREG. Journal of Physics: Conference Series, 2016, 761, 012021.	0.4	0
33	QED corrections to the Altarelli-Parisi splitting functions. European Physical Journal C, 2016, 76, 1.	3.9	53
34	The loop-tree duality at NLO and beyond. Nuclear and Particle Physics Proceedings, 2016, 273-275, 2009-2014.	0.5	0
35	Heavy quark impact factor at NLO. Nuclear and Particle Physics Proceedings, 2016, 273-275, 2743-2745.	0.5	0
36	Four-dimensional unsubtraction from the loop-tree duality. Journal of High Energy Physics, 2016, 2016, 1.	4.7	44

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37	Four-dimensional unsubtraction with massive particles. Journal of High Energy Physics, 2016, 2016, 1.	4.7	48
38	Towards gauge theories in four dimensions. Journal of High Energy Physics, 2016, 2016, 1.	4.7	52
39	Applications of the loop-tree duality. , 2016, , .		3
40	Attacking one-loop multi-leg Feynman integrals with the Loop-Tree Duality. , 2016, , .		2
41	Higher-order QCD corrections to triple collinear splitting functions. , 2016, , .		0
42	Single bottom quark production in $k_T$ -factorisation. Journal of High Energy Physics, 2015, 2015, 1.	4.7	22
43	Towards a Numerical Implementation of the Loop-Tree Duality Method. Nuclear and Particle Physics Proceedings, 2015, 258-259, 33-36.	0.5	8
44	Polarized triple-collinear splitting functions at NLO for processes with photons. Journal of High Energy Physics, 2015, 2015, 1.	4.7	11
45	Triple collinear splitting functions at NLO for scattering processes with photons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	18
46	On the singular behaviour of scattering amplitudes in quantum field theory. Journal of High Energy Physics, 2014, 2014, 1.	4.7	41
47	Double collinear splitting amplitudes at next-to-leading order. Journal of High Energy Physics, 2014, 2014, 1.	4.7	23
48	Complete QED NLO contributions to the reaction $e^+e^- \rightarrow \hat{\sigma}^* \hat{\sigma}^* \hat{\sigma}^* \hat{\sigma}^* \hat{\sigma}^* \hat{\sigma}^*$ and their implementation in the event generator PHOKHARA. Journal of High Energy Physics, 2014, 2014, 1.	4.7	18
49	Boosted objects and jet substructure at the LHC. Report of BOOST2012, held at IFIC Valencia, 23rd-27th of July 2012. European Physical Journal C, 2014, 74, 1.	3.9	124
50	Heavy quark impact factor and the single bottom production at the LHC. , 2014, , .		0
51	The loop-tree duality at work. , 2014, , .		0
52	Heavy quark impact factor. , 2014, , .		0
53	Tree-loop duality relation beyond single poles. Journal of High Energy Physics, 2013, 2013, 1.	4.7	45
54	Heavy quark impact factor in $k_T$ -factorization. Journal of High Energy Physics, 2013, 2013, 1.	4.7	3

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55	Oriented event shapes at N <sup>3</sup> LL + $\mathcal{O}(\alpha_{\mathrm{S}}^2)$ . Journal of High Energy Physics, 2013, 2013, 1.	4.7	11
56	News on the Loop-tree Duality. Acta Physica Polonica B, 2013, 44, 2207.	0.8	7
57	Recursive relations for multiparton splitting functions. , 2013, , .		0
58	Factorization violation in the collinear limit. , 2013, , .		0
59	Heavy quark impact factor and the single bottom production at the LHC. , 2013, , .		0
60	Space-like (vs. time-like) collinear limits in QCD: is factorization violated?. Journal of High Energy Physics, 2012, 2012, 1.	4.7	87
61	Charge asymmetries of top quarks at hadron colliders revisited. Journal of High Energy Physics, 2012, 2012, 1.	4.7	154
62	Tevatron anomalies and LHC cross-checks. , 2012, , .		0
63	Quest for precision in hadronic cross sections at low energy: Monte Carlo tools vs. experimental data. European Physical Journal C, 2010, 66, 585-686.	3.9	270
64	Heavy colored resonances in $t\bar{t} + \text{ext}\{\text{jet}\}$ at the LHC. Journal of High Energy Physics, 2010, 2010, 1.	4.7	34
65	A tree-loop duality relation at two loops and beyond. Journal of High Energy Physics, 2010, 2010, 1.	4.7	73
66	Gauge mediated supersymmetry breaking via seesaw mechanisms. Physical Review D, 2010, 81, .	4.7	5
67	Charge asymmetry of top quarks. , 2010, , .		0
68	Feynman's Tree Theorem and loop-tree dualities. , 2010, , .		0
69	A simple coloured indicator for monitoring ultra high pressure processing conditions. Journal of Food Engineering, 2009, 92, 410-415.	5.2	10
70	Constraining heavy colored resonances from top-antitop quark events. Physical Review D, 2009, 80, .	4.7	80
71	Charge asymmetries of top quarks: A window to new physics at hadron colliders. Journal of Physics: Conference Series, 2009, 171, 012091.	0.4	11
72	From multileg loops to trees (by-passing Feynman's Tree Theorem). Nuclear Physics, Section B, Proceedings Supplements, 2008, 183, 262-267.	0.4	17

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73	Top quarks, axigluons, and charge asymmetries at hadron colliders. Physical Review D, 2008, 77, .	4.7	142
74	Massive color-octet bosons and the charge asymmetries of top quarks at hadron colliders. Physical Review D, 2008, 78, .	4.7	70
75	From loops to trees by-passing Feynman's theorem. Journal of High Energy Physics, 2008, 2008, 065-065.	4.7	99
76	Proton stability, dark matter, and light color octet scalars in adjointSU(5)unification. Physical Review D, 2008, 78, .	4.7	42
77	Axigluon signatures at hadron colliders. , 2008, , .		0
78	Fermion masses and the UV cutoff of the minimal realisticSU(5)model. Physical Review D, 2007, 75, .	4.7	39
79	PHOKHARA, the radiative return and the puzzle. Nuclear Physics, Section B, Proceedings Supplements, 2007, 169, 271-276.	0.4	2
80	On unification and nucleon decay in supersymmetric grand unified theories based on. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 649, 197-205.	4.1	13
81	Electron-positron annihilation into three pions and the radiative return. European Physical Journal C, 2006, 47, 617.	3.9	29
82	Compact Multigluonic Scattering Amplitudes with Heavy Scalars and Fermions. Physical Review Letters, 2006, 96, 182001.	7.8	35
83	Radiative return at $\Phi$ - and B-factories: FSR for muon pair production at next-to-leading order. European Physical Journal C, 2005, 39, 411.	3.9	83
84	Multigluonic scattering amplitudes of heavy quarks. Journal of High Energy Physics, 2005, 2005, 079-079.	4.7	28
85	PERTURBATIVE GENERATION OF A STRANGE-QUARK ASYMMETRY IN THE NUCLEON. , 2005, , .		0
86	Perturbative Generation of a Strange-Quark Asymmetry in the Nucleon. Physical Review Letters, 2004, 93, 152003.	7.8	79
87	The radiative return at $\Phi$ - and B-factories: FSR at next-to-leading order. European Physical Journal C, 2004, 33, 333-347.	3.9	64
88	Nucleon form factors, B-meson factories and the radiative return. European Physical Journal C, 2004, 35, 527-536.	3.9	48
89	Resummed jet rates for heavy quark production in $e^+e^-$ annihilation. European Physical Journal C, 2004, 33, s457-s459.	3.9	7
90	Collinear splitting, parton evolution and the strange-quark asymmetry of the nucleon in NNLO QCD. Nuclear Physics, Section B, Proceedings Supplements, 2004, 135, 188-192.	0.4	3

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91	Perspectives for the radiative return at meson factories. Nuclear Physics, Section B, Proceedings Supplements, 2004, 131, 39-47.	0.4	3
92	The triple collinear limit of one-loop QCD amplitudes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 586, 323-331.	4.1	54
93	The radiative return at $\phi$ and B-factories: small-angle photon emission at next-to-leading order. European Physical Journal C, 2003, 27, 563-575.	3.9	80
94	Resummed jet rates for $e^+e^-$ annihilation into massive quarks. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 576, 135-142.	4.1	18
95	Precision measurement of the hadronic cross-section through the radiative return method. Nuclear Physics, Section B, Proceedings Supplements, 2003, 123, 167-176.	0.4	3
96	Radiative return at $e^+e^-$ factories. Nuclear Physics, Section B, Proceedings Supplements, 2003, 116, 249-253.	0.4	0
97	The radiative return at small angles: virtual corrections. European Physical Journal C, 2002, 25, 215-222.	3.9	38
98	Radiative return at NLO and the measurement of the hadronic cross-section in electron-positron annihilation. European Physical Journal C, 2002, 24, 71-82.	3.9	146
99	NLO QED corrections to ISR in $e^+e^-$ annihilation and the measurement of $\sigma(e^+e^- \rightarrow \text{hadrons})$ . Nuclear Physics, Section B, Proceedings Supplements, 2001, 99, 200-203.	3.9	44
100	QCD factorization with heavy quarks. Nuclear Physics, Section B, Proceedings Supplements, 2001, 99, 200-203.	0.4	2
101	Heavy quark impact factor at next-to-leading level. Journal of High Energy Physics, 2000, 2000, 042-042.	4.7	24
102	Dimensionally regularized box and phase-space integrals involving gluons and massive quarks. Journal of Physics G: Nuclear and Particle Physics, 1999, 25, 1593-1606.	3.6	11
103	Charge asymmetry of heavy quarks at hadron colliders. Physical Review D, 1999, 59, .	4.7	187
104	$m_b(m_Z)$ from jet production at the Z peak in the Cambridge algorithm. Physical Review D, 1999, 60, .	4.7	7
105	Heavy quark mass effects in $e^+e^-$ into three jets. Nuclear Physics, Section B, Proceedings Supplements, 1999, 74, 53-56.	0.4	2
106	Quark-mass effects for jet production in $e^+e^-$ collisions at the next-to-leading order: results and applications. Nuclear Physics B, 1999, 554, 257-297.	2.5	30
107	$\hat{\Gamma}_s(m_Z)$ from $\Gamma_b$ decays with matching conditions at three loops. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 424, 367-374.	4.1	65
108	The running of the b-quark mass from LEP data. Nuclear Physics, Section B, Proceedings Supplements, 1998, 64, 380-386.	0.4	0

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109	Charge Asymmetry in Hadroproduction of Heavy Quarks. Physical Review Letters, 1998, 81, 49-52.	7.8	184
110	Do the Quark Masses Run? Extracting $m_b(m_Z)$ from CERN LEP Data. Physical Review Letters, 1997, 79, 193-196.	7.8	90
111	Quark mass effects in QCD jets. Nuclear Physics, Section B, Proceedings Supplements, 1997, 54, 60-64.	0.4	19
112	Three-jet production at LEP and the bottom quark mass. Nuclear Physics B, 1995, 439, 505-535.	2.5	30
113	QCD matching conditions at thresholds. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 313, 441-446.	4.1	63