Roberto Balbinot

List of Publications by Year
in descending order

41 papers	916 citations	687363 13 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	442 citing authors

#	Article	IF	Citations
1	Quantum correlations across the horizon in acoustic and gravitational black holes. Physical Review D, 2022, 105, .	4.7	5
2	Ramp-up of Hawking Radiation in Bose-Einstein-Condensate Analog Black Holes. Physical Review Letters, 2021, 126, 111301.	7.8	8
3	Correlations between a Hawking particle and its partner in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mi mathvariant="normal">D</mml:mi></mml:mrow></mml:math> Bose-Einstein condensate analog black hole. Physical Review D, 2020, 102, .	4.7	3
4	Particle production in the interiors of acoustic black holes. Physical Review D, 2019, 100, .	4.7	7
5	Correlation patterns from massive phonons in 1+1 dimensional acoustic black holes: A toy model. Physical Review D, 2018, 98, .	4.7	5
6	Acoustic Hawking radiation. Nature Physics, 2016, 12, 897-898.	16.7	4
7	Scattering coefficients and gray-body factor for 1D BEC acoustic black holes: Exact results. Physical Review D, 2016, 93, .	4.7	9
8	Low frequency gray-body factors and infrared divergences: Rigorous results. Physical Review D, 2015, 91, .	4.7	16
9	Fourth derivative gravity in the auxiliary fields representation and application to the black-hole stability. European Physical Journal Plus, 2015, 130, 1.	2.6	9
10	Gray-body factor and infrared divergences in 1D BEC acoustic black holes. Physical Review D, 2014, 90, .	4.7	12
11	Amplifying the Hawking Signal in BECs. Advances in High Energy Physics, 2014, 2014, 1-8.	1.1	7
12	Hawking radiation correlations in Bose-Einstein condensates using quantum field theory in curved space. Physical Review D, 2013, 87, .	4.7	21
13	Understanding Hawking Radiation from Simple Models of Atomic Bose-Einstein Condensates. Lecture Notes in Physics, 2013, , 181-219.	0.7	5
14	Hawking radiation of massive modes and undulations. Physical Review D, 2012, 86, .	4.7	24
15	Acoustic white holes in flowing atomic Boseâ€“Einstein condensates. New Journal of Physics, 2011, 13, 025007.	2.9	48
16	TESTING HAWKING PARTICLE CREATION BY BLACK HOLES THROUGH CORRELATION MEASUREMENTS. International Journal of Modern Physics D, 2010, 19, 2371-2377.	2.1	9
17	Numerical observation of Hawking radiation from acoustic black holes in atomic Boseâ€“Einstein condensates. New Journal of Physics, 2008, 10, 103001.	2.9	216
18	Nonlocal density correlations as a signature of Hawking radiation from acoustic black holes. Physical Review A, 2008, 78, .	2.5	153

#	Article	IF	Citations
19	Depletion in Bose-Einstein condensates using quantum field theory in curved space. Physical Review A, 2007, 75, .	2.5	6
20	Backreaction in Acoustic Black Holes. Physical Review Letters, 2005, 94, 161302.	7.8	33
21	Quantum stress tensor for extreme 2D Reissner-NordstrÃ¶m black holes. Physical Review D, 2004, 70, .	4.7	7
22	Two-dimensional black holes and effective actions. Classical and Quantum Gravity, 2003, 20, 5439-5454.	4.0	8
23	Vacuum polarization in two-dimensional static spacetimes and dimensional reduction. Physical Review D, 2002, 66, .	4.7	14
24	Two-dimensional black holes in accelerated frames: quantum aspects. Classical and Quantum Gravity, 1997, 14, 463-476.	4.0	2
25	Two-dimensional black holes in accelerated frames: spacetime structure. Classical and Quantum Gravity, 1996, 13, 2457-2471.	4.0	7
26	Friedmann universes connected by Reissner-NordstrÃ¶m wormholes: Quantum effects. Physical Review D, 1995, 51, 2782-2791.	4.7	2
27	Inside two-dimensional black holes. Classical and Quantum Gravity, 1994, 11, 1763-1773.	4.0	14
28	Friedmann universes connected by Reissner-NordstrÃ¶m wormholes. Physical Review D, 1994, 49, 2801-2807.	4.7	5
29	Mass inflation: The semiclassical regime. Physical Review Letters, 1993, 70, 13-16.	7.8	57
30	Quantum bubble dynamics in the presence of gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 262, 222-226.	4.1	11
31	Classical solutions in theN=2,D=5supergravity theory. Physical Review D, 1990, 42, 1023-1026.	4.7	11
32	Scalar field in the Frolov-Markov-Mukhanov black-hole space-times. Physical Review D, 1990, 41, 1810-1814.	4.7	3
33	Stability of the Schwarzschild-de Sitter model. Physical Review D, 1990, 41, 395-402.	4.7	63
34	Matter, quantum gravity, and adiabatic phase. Physical Review D, 1990, 41, 1848-1854.	4.7	12
35	"Cosmological" vacuum state for a black hole immersed in an expanding Friedmann universe. Physical Review D, 1989, 40, 372-379.	4.7	5
36	On the stability of cauchy horizons in a black hole's nucleus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 227, 30-33.	4.1	3

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37	Solution of the Einstein-Strauss problem with aÎ›term. Physical Review D, 1988, 38, 2415-2418.	4.7	25
38	Improved model of bosonic string. Physical Review D, 1987, 36, 2589-2590.	4.7	0
39	Five-dimensional quantum gravity and the residual length. Physical Review D, 1986, 34, 3666-3669.	4.7	1
40	Back reaction and the small-mass regime. Physical Review D, 1986, 33, 1611-1615.	4.7	55
41	How do Black Holes evaporate?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 136, 337-340.	4.1	11