Simone Murro

List of Publications

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Publications

20. "On boundary conditions for linearised Einstein's equations"
    Applied Mathematics Letters (2024) vol 158: 109210
    (with M. Capoferri and G. Schmid)

19. "The five gradients inequality on differentiable manifolds "
    Journal de Mathématiques Pures et Appliquées (2024) vol 187: 294-328
    (with S. Di Marino and E. Radici)

18. "On the Cauchy problem for the Fadaray tensor on globally hyperbolic manifolds with timelike boundary"
    Rendiconti Lincei Matematica e Applicazioni (2024) vol 34: 809-829
    (with N. Drago and N. Ginoux)

17. "Global and microlocal aspects of Dirac operators: propagators and Hadamard states"
    to appear on *Advances in Differential Equations*
    (with M. Capoferri)

16. "The quantization of Proca fields on globally hyperbolic spacetimes: Hadamard states and Møller operators"
    Annales Henri Poincaré (2023) vol 24: 3055-3111
    (with V. Moretti and D. Volpe)

15. "Paracausal deformations of Lorentzian metrics and Møller isomorphisms in algebraic quantum field theory"
    Selecta Mathematica New Series vol 29: 56
    (with V. Moretti and D. Volpe)

14. "Møller operators and Hadamard states for Dirac fields with MIT boundary conditions"
    Documenta Mathematica (2022) vol 27: 1693-1737
    (with N. Drago and N. Ginoux)

13. "On the Cauchy problem for Friedrichs systems on globally hyperbolic manifolds with timelike boundary"
    Advances in Differential Equations (2022) vol 27: 497-542
    (with N. Ginoux)

12. "Injective tensor products in strict deformation quantization"
    Mathematical Physics, Analysis and Geometry (2022) vol 25: 2
    (with C.J.F. van de Ven)

11. "Intertwining operators for symmetric hyperbolic systems on globally hyperbolic manifolds"
    Annals of Global Analysis and Geometry (2021) vol 59: 1-25
    (with D. Volpe)

10. "On the uniqueness of invariant states"
    Advances in Mathematics (2021) vol 376: 107445
    (with F. Bambozzi)

9. "The well-posedness of the Cauchy problem for the Dirac operator on globally hyperbolic manifolds with timelike boundary"
   Documenta Mathematica (2020) vol 25: 737-765
   (with N. Große)

8. "The Fermionic Signature Operator in De Sitter Spacetime"
   Journal of Mathematical Analysis and Applications (2020) vol 485: 123808
   (with C. Dappiaggi, F. Finster and E. Radici)

7. "Invariant states on noncommutative tori"
   International Mathematics Research Notices (2019) vol 2021: 3299-3313
   (with F. Bambozzi and N. Pinamonti)

6. "A new class of Fermionic Projectors: Møller operators and mass oscillation properties"
   Letters in Mathematical Physics (2017) vol 117: 2433–2451
   (with N. Drago)

5. "The Fermionic Signature Operator and Quantum States in Rindler Space-time"
   Journal of Mathematical Analysis and Applications (2017) vol 454: 385-411
   (with F. Finster and C. Röken)

4. "Non-existence of natural states for Abelian Chern-Simons theory"
   Journal of Geometry and Physics (2017) vol 116: 119-123
   (with C. Dappiaggi and A. Schenkel)

3. "Wavefront sets and polarizations on supermanifolds"
   Journal of Mathematical Physics (2017) vol 58: 023504
   (with C. Dappiaggi, H. Gimperleinand A. Schenkel)

2. "The fermionic projector in a time-dependent external potential: mass oscillation property and Hadamard states"
   Journal of Mathematical Physics (2016) vol 57: 072303
   (with F. Finster and C. Röken)

1. "Radiative observables for linearized gravity on asymptotically flat spacetimes and their boundary induced states"
   Journal of Mathematical Physics (2014) vol 55: 082301
   (with M. Benini and C. Dappiaggi)

Pre-print

4. "The fermionic entanglement entropy of causal diamonds in two-dimensional Minkowski space "
   arXiv:2407.05292 [math-ph] (2024) (with F. Finster, M. Lottner and A. Much)

3. "The Quantization of Maxwell Theory in the Cauchy Radiation Gauge: Hodge Decomposition and Hadamard States"
   arXiv:2401.08403 [math.AP] (2024) (with G. Schmid)

2. "Wick rotation of linearized gravity in Gaussian time and Calderón projectors"
   arXiv:2204.01094 [math-ph] (2022) (with C. Gérard and M. Wrochna)

1. "The Cauchy problem of the Lorentzian Dirac operator with APS boundary conditions"
   arXiv:2104.00585 [math.AP] (2021). (with N. Drago and N. Große)

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