

PUBLICATIONS

1. Lorenzo Leone, Salvatore F.E. Oliviero, Alioscia Hamma
Stabilizer Rényi entropy
[Physical Review Letters 128, 050402\(2022\)](#)
2. Salvatore F.E. Oliviero, Lorenzo Leone, Alioscia Hamma and Seth Lloyd
Measuring Magic on a quantum processor
[npj Quantum Information 8, 148 \(2022\)](#)
3. Lorenzo Leone, Salvatore F.E. Oliviero, You Zhou, Alioscia Hamma
Quantum Chaos is Quantum
[Quantum, volume 5, page 453 \(2021\)](#)
4. Salvatore F.E. Oliviero, Lorenzo Leone, You Zhou, Alioscia Hamma
Stability of topological purity under random local unitaries
[SciPost Phys. 12, 096 \(2022\)](#)
5. Salvatore F.E. Oliviero, Lorenzo Leone, Alioscia Hamma
Transitions in entanglement complexity in random quantum circuits by measurements
[Physics Letters A, 127721\(2021\)](#)
6. Salvatore F.E. Oliviero, Lorenzo Leone, Francesco Caravelli, Alioscia Hamma
Random Matrix Theory of the Isospectral Twirling
[SciPost Phys. 10, 076 \(2021\)](#)
7. Lorenzo Leone, Salvatore F.E. Oliviero, Alioscia Hamma
Isospectral twirling and quantum chaos
[Entropy 2021, 23\(8\), 1073\(2021\)](#)
8. Salvatore F.E. Oliviero, Lorenzo Leone, Alioscia Hamma
Magic-state resource theory for the ground state of the transverse field Ising model
[Physical Review A 106, 042426](#)
9. Lorenzo Leone, Salvatore F.E. Oliviero, Stefano Piemontese, Sarah True, Alioscia Hamma
Retrieving Information from a black hole using quantum machine learning
[Phys. Rev. A 106, 062434](#)
10. Lorenzo Leone, Salvatore F.E. Oliviero, Alioscia Hamma
Nonstabilizerness determining the hardness of direct fidelity estimation
[Accepted in Phys. Rev. A](#)
11. Max Kurkov, Lorenzo Leone
Remark on the synergy between the heat kernel techniques and the parity anomaly
[International Journal of Geometric Methods in Modern Physics, 17, 2050002-679\(2020\)](#)

PREPRINTS

12. Lorenzo Leone, Salvatore F.E. Oliviero, Seth Lloyd, Alioscia Hamma
Learning efficient decoders for quasi-chaotic quantum scramblers
<https://doi.org/10.48550/arXiv.2212.11338>
13. Salvatore F.E. Oliviero, Lorenzo Leone, Seth Lloyd, Alioscia Hamma
Black hole complexity, unscrambling and stabilizer thermal machines
<https://doi.org/10.48550/arXiv.2212.11337>

14. Lorenzo Leone, Salvatore F.E. Oliviero, Gianluca Esposito, Alioscia Hama
Phase transition in Stabilizer Entropy and efficient purity estimation
<https://doi.org/10.48550/arXiv.2302.07895>
15. Lorenzo Leone, Salvatore F.E. Oliviero, Lukasz Cincio, Marco Cerezo
On the practical usefulness of the Hardware Efficient Ansatz
<https://doi.org/10.48550/arXiv.2211.01477>