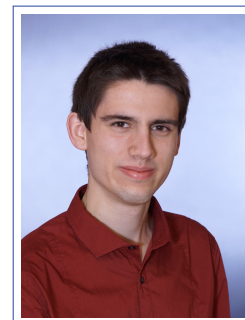


Dominik Hahn



Personal Information

Date of birth January 30, 1998
Nationality German

Education

2015-2018 **Bachelor Physics**, University Regensburg, Bachelor thesis: "Out-of-time-ordered-correlators in the attractive Lieb-Liniger model with external potential".

2016-2020 **Membership of the Research Study Course Physics**, *University Regensburg/FAU Erlangen*, Elite graduate program of the Elite Network of Bavaria.

2019-2020 **Master Physics**, University Regensburg.
Master thesis: "Harmonic chains with hard wall constraints in classical and quantum mechanics"

September to December 2019 **Research visit at Princeton University**, group of Shivaji Sondhi.

since September 2020 **PhD**, Max Planck Institute for the Physics of Complex Systems.

Internships

October 2017 **Max Planck Institut for the Science of Light**, *Sandoghdar Division*, experimental internship.
"Dependence of the Q-factor and coupling efficiency on the waveguide resonator spacing design"

Februar to April 2019 **University Regensburg**, *Group of Prof. Dr. Ferdinand Evers*, theoretical internship.
"Self-consistent field method for s-wave and p-wave superconductivity"

May to June 2020

Technical University Munich, *Group of Prof. Dr. Michael Knap and Prof. Dr. Frank Pollmann*, theoretical internship.
"Analyzing the Dynamics of Renyi Entropies in the Many-Body Localized Phase"

Publications

- 2022 **Verification of the Quantum Jarzynski Equality on Digital Quantum Computers** , Dominik Hahn, Maxime Dupont, Markus Schmitt, David J. Luitz, Marin Bukov.
arXiv:2207.14313
- 2022 **Optimal compression of quantum many-body time evolution operators into brickwall circuits** , Maurits S. J. Tepaske, Dominik Hahn, David J. Luitz.
arXiv:2205.03445
- 2021 **Information Dynamics in a Model with Hilbert Space Fragmentation**, Dominik Hahn, Paul A. McClarty, David J. Luitz.
SciPost Phys. 11, 074 (2021)
- 2021 **Ergodic and nonergodic many-body dynamics in strongly non-linear lattices**, Dominik Hahn, Remy Dubertrand, Juan-Diego Urbina, Klaus Richter, Shivaji Sondhi.
Phys. Rev. E 103, 052213

Talks

- April 1, 2019 **Out-of-time-ordered-correlators at the transition from criticality to chaos**, DPG Spring Meeting Regensburg.

Scholarships

- since 2016 **Elite Network of Bavaria.**
since 2018 **Max Weber-Program.**
2019 **PROMOS travelling grant.**

Computer Knowledges

Python
C
C++
Mathematica