



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Herrn M.Sc. Jurek Frey
Theoretische Physik
(Prof. Dr. Frank Wilhelm-Mauch)

am

Montag, 13. Juli 2026, 10:00 Uhr s.t.

per Videokonferenz: Link für MS Teams: <http://bit.ly/44rb67P>

Raum für die Prüfung: Seminarraum E.04, Gebäude E2.6

Thema der Dissertation:

Optimal control and noise characterization for few qubit systems

We present an investigation into key building blocks for future quantum computing and quantum communication technologies. The focus is on the characterization and control of germanium-vacancy centers as candidates for quantum repeaters, the development of efficient optimal-control methods to mitigate decoherence under realistic noise conditions, and the simulation and analysis of a superconducting-qubit experiment. Together, these studies contribute to improving the performance, reliability, and scalability of quantum systems.

Saarbrücken, 29. Juni 2026



Prof. Dr.-Ing. Georg Frey