

Invitation to the Oral Examination – Department EE

For the occasion of his examination for a Doctoral Degree,

Mr. Maximilian Fink

will present his dissertation entitled/on

Hochleistungsfähiges Short-Range LiDAR-System mit Multi-Laser-Technologie für Autonome Fahrzeuge

on **30 September 2024** at **10:00 h**

Attendance to the presentation is open to the public. The presentation will be in German.

The candidate, all members of the Examination Committee, and authorized examiners of the TUM School of CIT are invited to the presentation and subsequent oral examination.

The presentation and subsequent examination will take place in room N0116, Theresienstr. 90, Munich.

Examination committee:

Chair: **Prof. Dr.-Ing. Thomas Eibert**

First Examiner: **Prof. Dr.-Ing. habil. Dr. h.c. Alexander W. Koch**

Second Examiner: **Prof. Dr. rer. nat. habil. Gabriele Schrag**

Munich, the 09th of September 2024

Mailing list:

Members of the examination committee

Doctoral candidate

Abstract:

Autonomous vehicles currently use camera and radar sensors to detect their surroundings. In the future, safety is to be further increased by supplementing the with LiDAR sensors. The requirements for measurement rate and angular resolution pose challenges for the development of these systems. The present work follows the approach of a multi-laser technology. The field of view is scanned in parallel by several lasers and detector, allowing a large angular space to be captured with high resolution and frame rate.