

Invitation to the Oral Examination – Department CE

For the occasion of his examination for a Doctoral Degree,

Florian Bischeltsrieder

will present his dissertation entitled/on

A position estimation algorithm and signal model for near range harmonic radar

on 12th May 2026 at 15:00

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

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, 80333 Munich, TU München.**

Examination committee:

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

First Examiner: **Prof. Dr.-Ing. Wolfgang Utschick**

Second Examiner: **Prof. Dr.-Ing. Martin Vossiek**

Munich, the **14th of April 2026**

Mailing list:

Members of the examination committee

Doctoral candidate

Abstract:

In this thesis, the problem of detecting and localizing unknown targets composed of electronic circuit components using harmonic radar is investigated. To this end, a signal model based on the Volterra series, which describes the nonlinear and frequency-dependent transfer behavior of the observed targets, is being proposed. Furthermore, a position estimation algorithm based on conditional maximum likelihood estimation and the block orthogonal matching pursuit techniques is developed.