

Mailing list:

Members of the examination committee
Doctoral candidate

Munich, July 04, 2024

Invitation to the Oral Examination – Department EE

For the occasion of his examination for a Doctoral Degree,

Mr. Simon Essing

will present his dissertation entitled:

“Physics-Based Modular Development Platform for Non-Resonant Miniaturized Photoacoustic Gas Sensors ”

(„Physikalisch Basierte, Modulare Entwicklungsplattform für Nicht-Resonante, Miniaturisierte,
Photoakustische Gas-Sensoren “)

on

July 22nd, 2024, at 11:00 AM

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 presence
in room:

N1414, N4 (on the first floor), Theresienstr. 90, 80333 Munich (Professorship of
Microsensors and Actuators)

Examination committee:

Chair: Prof. Dr. Angela Schöllig
First Examiner: Prof. Dr. Gabriele Schrag
Second Examiner: Prof. Dr.-Ing. Alexander W. Koch

Abstract:

“A modular development platform for miniaturized photoacoustic gas sensors is presented. Using physical models and adapted algorithms for data analysis, it is possible to self-design a configurable gas sensor according to the desired requirements. Target gases, sensor sensitivity, response time and robustness to interferences can be considered. The platform has been successfully implemented, as shown by the prototypes for various gases.”