

INVITATION TO THE PRESENTATION ABOUT THE WORKPLACEMENT

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**“Advancing Computer Vision for Dislocation Detection in
SEM Imagery”**

📍 N.1.43

📅 Wednesday, 16 July 2025

🕒 11:00 a.m.

Abstract

The talk will unveil the outcomes of my recent internship project, carried out within the Data Science/Math Team at KAI GmbH. The focus of this project was the application of cutting-edge computer vision methodologies for detecting dislocations in Scanning Electron Microscope (SEM) images. Through this presentation, I will not only showcase the technical strategies and tools employed - including image preprocessing, feature extraction, and detection algorithms - but also provide an in-depth look into a typical "project flow". From the initial idea to the development and delivery of a finished plugin, this session will highlight key milestones, challenges, and solutions encountered during the process.

Albrecht Gebhardt and the Department of Statistics look forward to seeing you
at the talk!