

# geometrical structures from point clouds

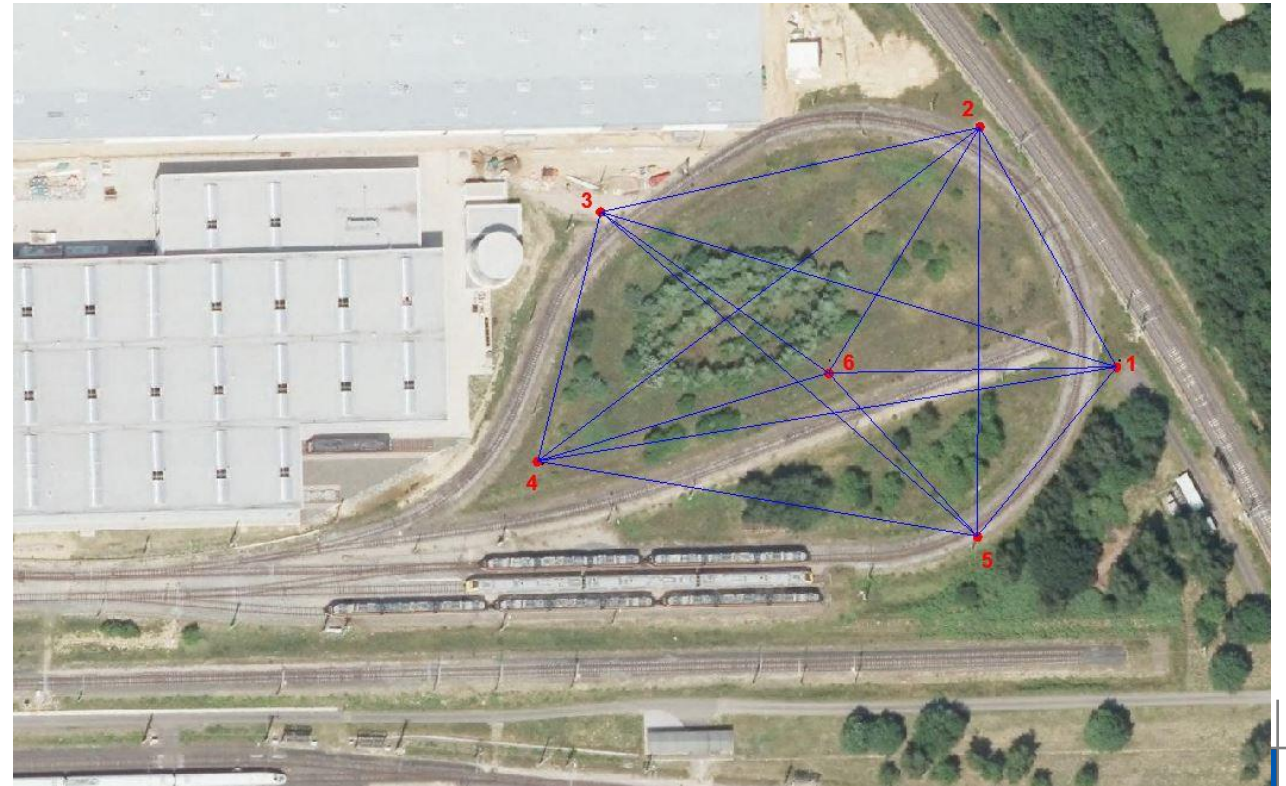
Dr.Ing. Hanns-F. Schuster

The logo for GEOHAUS, featuring the word "GEOHAUS" in a blue, sans-serif font. The letter "O" is stylized with a white circle inside. The logo is positioned to the left of a blue square.

# Project Galil-EU

Status: finished

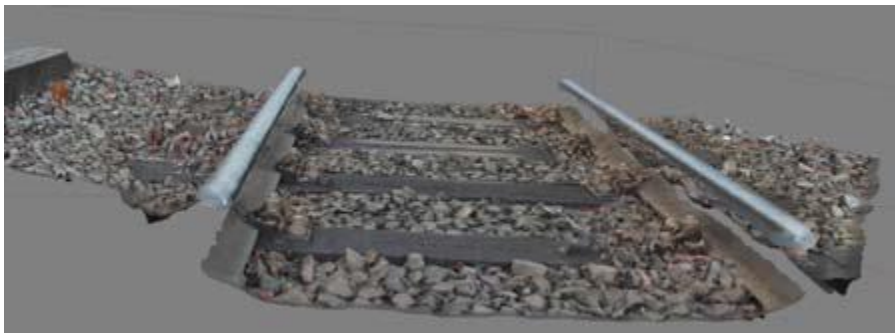
- Development of a Testbed for GNSS-Receivers for static and dynamic measurements
- We use a Rail-loop as a quasi invariant test site
- A gang car runs remotely on the track
  - Can be equipped with sensors
  - Can be measured from the outside



# Project: Smart Rail Inspector

Status: ongoing

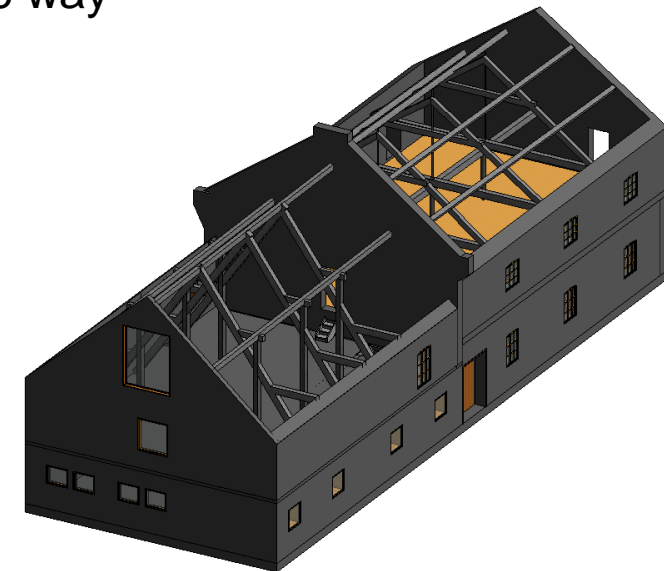
- Development of a device for detection of faults and deformations in rail tracks
- The device can be attached to any train to flow with the normal traffic in 80-100 km/h
- The track deformations that we detect are “Riffels”, deformations of the depth of 0,1 mm, which are the dominant source of noise and a beginning of degradation of the tracks
- Goal is to minimize the noise of train traffic and to be able to act in a maintenance management cycle to minimize the costs of the maintenance



# Project: Interpretation of PointClouds

## Status: seeking for partners

- We take the component for high precision geolocalization developed in the project SRI
- Together with a Laserscanner we get a „mobile mapping“ unit,
- This can be used on streets (on top of a car) or in buildings (by carrying the device)
- The resulting point clouds need to be interpreted in an automatic way
  - Building Information Modelling
  - City-Modelling via GML



# Thank you !

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**GEOHAUS**



# Geodätische Referenzstrecke

zur dynamischen Validierung  
von Positionssensoren