

# Workshop on Induced Seismicity

7 and 8 November 2024  
Karlsruhe, Germany

Organized by:  
FKPE working group on induced seismicity (AGIS)  
Geophysical Institute, Karlsruhe Institute of Technology (KIT)

Venue:  
Geophysical Institute  
room 006.1, ground floor of building 06.34  
Hertzstraße 16  
76187 Karlsruhe  
Germany

## **Thursday, 07.11.2024 (13:00 – 17:00)**

### **Workshop Oral Session 1 (13:00 – 14:30)**

Sadegh Karimpouli (GFZ German Research Center for Geosciences)  
Labquake forecasting using machine learning: How are catalog-driven features informative?

Andreas Rietbrock (Karlsruhe Institute of Technology)  
AI-based monitoring of geothermal seismicity

Janis Heuel (Karlsruhe Institute of Technology)  
Seismic Phase Picking for Induced Seismicity with Deep Learning

### **Break (14:30 – 15:30)**

### **Workshop Oral Session 2 (15:30 – 17:00)**

Niederhuber, T.; Müller, B. (Karlsruhe Institute of Technology); Schilling, F. R.; Röckel, T.; Tsereteli, N.; Rebmeister, M.; Schenk, A.; Westerhaus, M.; Rietbrock, A.  
Combined Monitoring at the Enguri Arch Dam in Georgia

Mohammad Moein (FU Berlin)  
Long-duration injection protocols can trigger larger earthquakes

Tobias Meier (geomecon GmbH)  
Multilateral development of geothermal reservoirs in the Upper Rhine Graben to reduce the risk of induced seismicity - The AGENS project

### **Joint Dinner (19:00)**

## **Friday, 08.11.2024 (09:30 – 12:30)**

### **Workshop Oral Session 3 (09:30 – 11:30)**

Harold Kühn (BGE Bundesgesellschaft für Endlagerung mbH)  
Microseismic monitoring of the Asse II mine

Thomas Braun (INGV) Letizia Anderlini, Alexander Garcia  
Update on the Monitoring of the Oil & Gas production in Basilicata

Kees Weemstra (KNMI)  
A magnitude of completeness map for the Netherlands

Monika Bischoff (LBEG Niedersachsen), Ayk Schindewolf, Thomas Plenefisch,  
Matthias Napp  
Induced seismic events in the gas production regions of Lower Saxony – recent  
events, routines and new developments

### **Break (11:30 – 12:00)**

### **Workshop Poster Session (12:00 – 12:30)**

Luc Moutote, Lorenz Marten, Simon Kremers (DMT GmbH & Co.Kg)  
Advances in monitoring of induced seismicity at the Balmatt Deep Geothermal  
Energy plant in Mol, Belgium

Jérôme Azzola (Karlsruhe Institute of Technology)  
Implementation and evaluation of Distributed Acoustic Sensing (DAS) for continuous  
seismic monitoring of geothermal fields in the Munich area

### **AGIS meeting of members, in German (12:30 – 14:00)**