

# 50. Sitzung der AG Seismologie

Hamburg, 16-19 September 2024



Universität Hamburg  
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# **AG Seis 2024**

**Monday, September 16, 2024 - Thursday, September 19, 2024**

**Geomatikum, Hamburg**  
**Program**

# Monday, September 16, 2024

**Session 1: AK Seismologische Auswertung und die Techniksitzung - 1528 (2:00 PM - 4:00 PM)**

**-Conveners: Stefan Stange; Thomas Forbriger; Thomas Plenefisch**

**Coffee break - EG Cafeteria (4:00 PM - 4:30 PM)**

**Session 1: AK Seismologische Auswertung und die Techniksitzung - 1528 (4:30 PM - 6:30 PM)**

**-Conveners: Stefan Stange; Thomas Forbriger; Thomas Plenefisch**

# Tuesday, September 17, 2024

## Session 1: AK Seismologische Auswertung und die Techniksitzung - 1528 (8:30 AM - 10:00 AM)

-Conveners: Thomas Forbriger; Stefan Stange; Thomas Plenefisch

## Session 2: AG Maschinelles Lernen in der Geophysik - 1438 (8:30 AM - 10:00 AM)

-Conveners: Conny Hammer

time	[id] title	presenter
8:30 AM	[39] Welcome and Introduction of the Working Group Machine Learning in Geophysics	HAMMER, Conny
9:10 AM	[40] Towards the Clustering of Large Distributed Acoustic sensing Datasets	BÖLT, Oliver
9:30 AM	[41] Neural network approach on seismic array processing	BANASKIEWICZ, Benjamin
9:50 AM	[43] Time for open discussion	

## Coffee Break (10:00 AM - 10:30 AM)

## Session 1: AK Seismologische Auswertung und die Techniksitzung - 1528 (10:30 AM - 12:00 PM)

-Conveners: Thomas Forbriger; Thomas Plenefisch; Stefan Stange

## Session 2: AG Maschinelles Lernen in der Geophysik - 1438 (10:30 AM - 12:00 PM)

-Conveners: Conny Hammer

time	[id] title	presenter
10:30 AM	[45] Predictive modeling of seismic wave fields: Learning the transfer function using encoder-decoder networks	KLINGE, Jana
10:50 AM	[47] Deep learning prediction of measured earthquake waveforms from synthetic data	BAUER, Alexander
11:10 AM	[48] HR-GNSS Data Monitoring for Earthquakes Analysis using Deep Learning Algorithms	QUINTEROS-CARTAYA, Claudia
11:30 AM	[49] Machine learning for labquake forecasting using catalog-driven features	KARIMPOULI, Sadegh
11:50 AM	[50] Time for open discussion	

## Lunch (12:00 PM - 2:00 PM)

## Session 1: AK Seismologische Auswertung und die Techniksitzung (informal part) - 1528 (2:00 PM - 3:30 PM)

## Session 3: AG Seismologie - Hörsaal 4 (2:00 PM - 3:30 PM)

-Conveners: Céline Hadziioannou

time	[id] title	presenter
2:00 PM	[3] Towards continuous sub-oceanic monitoring with SUBMERSE and SAFATOR	TILMANN, Frederik
2:20 PM	[4] Recent developments at GEOFON	STROLLO, Angelo
2:40 PM	[5] Deutsches Stationsnetz und BGR Datenzentrum	STAMMLER, Klaus

3:00 PM	[6] Geophysical/Geological survey for underground laboratories in the Lausitz granodiorite massif	LINDNER, Mike
3:20 PM	[16] Time for open discussion	

**Coffee break (3:30 PM - 4:00 PM)**

**Session 1: AK Seismologische Auswertung und die Techniksitzung (informal part) - 1528 (4:00 PM - 5:00 PM)**

**Session 3: AG Seismologie - Hörsaal 4 (4:00 PM - 5:00 PM)**

-Conveners: Céline Hadziioannou

time	[id] title	presenter
4:00 PM	[7] A rockslide-generated tsunami in a Greenland fjord rang the Earth for 9 days	SCHIPPKUS, Sven
4:20 PM	[8] Lifting the veil on enigmatic low-frequency signals from Greenland	WIDMER-SCHNIDRIG, Rudolf
4:40 PM	[9] The cascade of events triggering a teleseismic week-long monochromatic signal	CARRILLO PONCE, Angela

**Celebrating 50 years of AG Seismologie (5:00 PM - 6:00 PM)**

**Session 3: Mitgliederversammlung AG Seismologie - Hörsaal 4 (6:00 PM - 7:30 PM)**

# Wednesday, September 18, 2024

## Session 1: AK Seismologische Auswertung und die Techniksitzung (informal part) - 1528 (8:30 AM - 10:00 AM)

## Session 3: AG Seismologie - Hörsaal 4 (8:30 AM - 10:00 AM)

-Conveners: Céline Hadzioannou

time	[id] title	presenter
8:30 AM	[10] Predicting earthquake-induced wavefield and stress dynamics in high-alpine mountains using full waveform modeling	LIMBERGER, Fabian
8:50 AM	[11] A refined shear velocity model beneath the Iranian plateau using adjoint noise tomography	KOMEAZI, Abolfazl
9:10 AM	[12] Sustainable preservation of analogue seismic data in Germany – Digitization test.	KULIKOVA, Galina
9:30 AM	[13] "Verlorene" seismologische Archive	KRÜGER, Frank
9:50 AM	[17] Time for open discussion	

## Coffee Break (10:00 AM - 10:30 AM)

## Poster session - 13th floor (10:30 AM - 12:00 PM)

[id] title	presenter	board
[51] From Fiber Optics to Public Fascination: The WAVE Initiative's Seismic Outreach	BEIS, Spiridon	1
[52] Locating seismic sources using the WAVE Distributed Acoustic Sensing Network as an array	WODTKE, Vincent	2
[53] Einstein Telescope	VOSSIUS, Wanda	3
[54] Rotational Seismology: from Simulations to Structural Health Monitoring	DHABU, Anjali	4
[55] 6C Operational Modal Analysis of wind turbines for damage detection	MÜLLER, Laurin	5
[56] Seismic Investigation of the Åknes Rockslide: Using Ambient Seismic Noise to Identify Possible Rockslide Movement	BOGNER, Laura	6
[57] Attenuation tomography in North Rhine-Westphalia	KARAMZADEH, Nasim	7
[58] Investigation of seismicity in the Eifel region, using data from the Eifel Large-N Network	LAUMANN, Patrick	8
[59] First results of local earthquake travel-time tomography in the Eifel region based on the large-N seismic dataset	ZHANG, Hao	9
[76] The manual analysis of teleseismic events at the Federal Seismological Survey of BGR - including depth, secondary and core phases	PLENEFISCH, Thomas	10
[60] High frequency 3D array analysis of April 2021 earthquake swarm and search for tremor-like source processes in Westbohemia/ Vogtland	HANNEMANN, Katrin	11
[61] FRAME – a Fast Response Aftershock network for the Moroccan Earthquake 2023	ZECKRA, Martin	12
[62] Investigating the D'' structure beneath the Indian Ocean with source- and receiver arrays	TÖLLE, Lena	13
[63] Investigation of the D'' reflector with short epicentral distances	PAHLINGS, Julia	14

[64] Testing the consistency of D" reflected waves beneath Siberia for different crossing paths	THIYAGARAJAN, Harini	15
[65] Uncertainty estimations of manual shear wave splitting measurements by comparing multiple analyses of the same dataset	DORN, Fiona	16
[66] Modelling the Effect of Source-side Subduction on PKP Differential Time Measurements	RUSSELL, Stuart	17
[67] Short distance observations of mantle transition zone discontinuities	SAKI, Morvarid	18
[68] Real Time 3D-Earthquake visualization of Earthquakes	SONNABEND, Lutz	19
[69] The known unknown source	BERAUS, Sarah	20
[70] Testing AI-based denoising and picking techniques for microearthquake detection in an urban area in the Lower Rhein Embayment, Germany	CARRASCO, Sebastian	21
[72] Transformer-Based Prediction of 3-Component Seismic Waveforms and Phase Arrival Times	ESMAIL, Waleed	22
[73] DeepDAS: Earthquake Phase Picker from Submarine Distributed Acoustic Sensing Data	XIAO, Han	23
[75] Weiblich oder männlich: Das ist hier die Frage! Wirklich? - Geschlechtsbezogene Statistiken der DGG	DONNER, Stefanie	24

**Session 1: AK Seismologische Auswertung und die Techniksitzung (informal part) - 1528 (10:30 AM - 12:00 PM)**

**Lunch (12:00 PM - 2:00 PM)**

**Session 3: AG Seismologie - Hörsaal 4 (2:00 PM - 3:30 PM)**

-Conveners: Céline Hadziioannou

time	[id] title	presenter
2:00 PM	[14] Cemented fibers as a test-bed for distributed acoustic sensing (DAS)	FORBRIGER, Thomas
2:20 PM	[15] Whispers in the WAVES: Decoding Campus Vibrations with Distributed Acoustic Sensing	HADZIOANNOU, Céline
2:40 PM	[18] Coherent and Incoherent Noise Cancellation Using Distributed Optical Fiber Sensors	RADING, Reinhardt
3:00 PM	[19] On the plane wave approximation for converting particle velocity into strain	FORBRIGER, Thomas
3:20 PM	[20] Time for open discussion	

**Coffee Break (3:30 PM - 4:00 PM)**

**Session 3: AG Seismologie - Hörsaal 4 (4:00 PM - 5:30 PM)**

-Conveners: Céline Hadziioannou

time	[id] title	presenter
4:00 PM	[21] First analysis from two BlueSeis rotational seismometers in Vogtland, Germany: Indications for strong site-effects?	LEHR, Johanna
4:20 PM	[22] Modal Analysis of Bridge Structure using 6C measurements	DHABU, Anjali
4:40 PM	[23] Time- and stress-dependent elastic properties in a concrete structure; spotting internal damage footprints	DOMINGUEZ-BUREOS, Marco

5:00 PM	[24] Mantle Scattering of Seismic Energy into the Core Shadow	SENS-SCHÖNFELDER, Christoph
5:20 PM	[25] Time for open discussion	

**Dinner together at Restaurant "mama" Pöseldorf (7:00 PM - 10:00 PM)**



# Thursday, September 19, 2024

## **Session 3: AG Seismologie - Hörsaal 4 (8:30 AM - 10:00 AM)**

-Conveners: Céline Hadziioannou

time	[id] title	presenter
8:30 AM	[26] On the undesired behaviour of higher-order correlations	SCHIPPKUS, Sven
8:50 AM	[27] Impact of ocean-generated microseism on the European X-ray Free Electron Laser	GENTHE, Erik
9:10 AM	[28] Secondary microseisms in ice-covered areas - two examples from Antarctica	SCHMIDT-AURSCH, Mechita
9:30 AM	[29] Monitoring seismic velocity changes at Campi Flegrei (Italy) using seismic noise interferometry	VAN LAATEN, Marcel
9:50 AM	[30] Time for open discussion	

## **Coffee Break (10:00 AM - 10:30 AM)**

## **Session 3: AG Seismologie - Hörsaal 4 (10:30 AM - 12:00 PM)**

-Conveners: Céline Hadziioannou

time	[id] title	presenter
10:30 AM	[31] Onshore Seismic Monitoring of Submarine Kavachi Volcano Reveals Vigorous Eruptive Activity	RÜMPKER, Georg
10:50 AM	[32] Continued unrest and fissure eruptions along the Reykjanes, trans-tensional volcano-tectonic rift, Iceland	DAHM, Torsten
11:10 AM	[33] Fluid-induced earthquake swarms: The 2024 Klingenthal-Kraslice Seismic Activity and Fluid Dynamics in NW Bohemia/Vogtland	BÜYÜKAKPINAR, Pinar
11:30 AM	[34] The onset of aftershocks: Testing predictions of seismicity models	HAINZL, Sebastian
11:50 AM	[35] Time for open discussion	

## **Lunch (12:00 PM - 2:00 PM)**

## **Session 4: AK Wind - 1528 (2:00 PM - 3:30 PM)**

-Conveners: Sebastian Busch

## **Coffee Break (3:30 PM - 4:00 PM)**

## **Session 4: AK Wind - 1528 (4:00 PM - 5:30 PM)**

-Conveners: Sebastian Busch