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Geophysical Observatory - Department of Earth Sciences
Ludwig-Maximilians-University, Munich

Research interest

- Observational seismology, especially in the field of triggered and induced seismicity
- Array-techniques in seismology
- Wavefield gradients (rotational seismology)
- All aspects of volcano-seismology and related fields
- Cryo seismology
- Signal processing
- Automatic "real-time" processing of network/array data

Professional record and academic education

Since 2004	Senior Research Scientist, Head of Geophysical Observatory, Ludwig-Maximilians-Universität, Munich (akad. Director)
2003-2004	Senior Research Scientist, Federal Institute of Geosciences and Natural Resources
1997-2003	Researcher with teaching obligations (C1-level), Potsdam University
1997	PostDoc, Ludwig-Maximilians-Universität, Munich
1993-1997	Dr. rer. nat., University of Stuttgart
1986-1992	Dipl. Geophys., Ludwigs-Maximilians University, Munich

Miscellaneous

Publication & Public Scientific Service:

- about 80 refereed publications
- 2010-2018 member of the editorial board of Geophysical Journal International
- 2013-2025 member of the board of the 'Deutsche Geophysikalische Gesellschaft'
- frequent reviewer of JGR, GRL and BSSA and science foundations (NSF, Czech Republic, ERC)

Currently Funded Projects

- The Seismological Service of Bavaria: LfU Bavaria, Bayerische Staatsministerium für Umwelt, Gesundheit und Verbraucherschutz; Partners: Landesamt für Umwelt (semi-permanent)
- Geothermal Alliance Bavaria: research on the occurrence of micro-earthquakes in the Bavarian molasse and in close proxy to geothermal reservoirs
- DEFORM (SPP DFG funded)
- ReMol – Induced/triggered Seismicity

Supervisory work

>20 Diploma/Msc students; 7 PhD students; 3 PostDocs

10 selected publications

- Beyreuther, Moritz, Robert Barsch, Lion Krischer, Tobias Megies, Yannik Behr, and **Joachim Wassermann** (2010), ObsPy: A Python Toolbox for Seismology, SRL, 81(3), 530-533, doi:[10.1785/gssrl.81.3.530](https://doi.org/10.1785/gssrl.81.3.530).
- Beyreuther, M., Carniel, R. and J. **Wassermann** (2008), Continuous Hidden Markov Models: Application to automatic earthquake detection and classification at Las Canadas caldera, Tenerife, *Journal of Volcanology and Geothermal Research*, 176, 513-518, doi:[10.1016/j.jvolgeores.2008.04.021](https://doi.org/10.1016/j.jvolgeores.2008.04.021).

- Hainzl, S., Y. Ben-Zion, C. Cattania, and **J. Wassermann** (2013), Testing atmospheric and tidal earthquake triggering at Mt. Hochstaufen, Germany, *JGR*, 118, doi:10.1002/jgrb.50387.
- Kraft, T., **J. Wassermann**, E. Schmedes, and H. Igel (2006), Meteorological triggering of earthquake swarms at Mt. Hochstaufen, SE-Germany, *Tectonophysics*, 424(3-4), 245-258, doi:10.1016/j.tecto.2006.03.044
- Megies, T., and **J. Wassermann** (2014), Microseismicity Observed at a Non-Pressure-Stimulated Geothermal Power Plant, *Geothermics*, 52, 36-49, doi:10.1016/j.geothermics.2014.01.002.
- Sollberger, D., Igel, H., Schmelzbach, C., Edme, P., van Manen, D.-J., Bernauer, F., et al. (2020). Seismological Processing of Six Degree-of-Freedom Ground-Motion Data. *Sensors*, 20(23), 6904. <https://www.mdpi.com/1424-8220/20/23/6904>.
- Suryanto, W., **J. Wassermann**, H. Igel, A. Cochard, D. Vollmer, F. Scherbaum, A. Velikosevtsev, and U. Schreiber (2006), First comparison of seismic array derived rotations with direct ring laser measurements of rotational ground motion, *Bull. Seism. Soc. Am.*, 96(6), 2059-2071, doi:10.1785/0120060004.
- **Wassermann, J.**, Bernauer, F., Shiro, B., Johanson, I., Guattari, F., & Igel, H. (2020). Six-axis ground motion measurements of caldera collapse at kilauea volcano, hawai'i—more data, more puzzles? *Geophysical Research Letters*, 47(5), e2019GL085999.
- **Wassermann, J.**, Wietek, A., Hadziioannou, C., & Igel, H. (2016). Toward a single-station approach for microzonation: Using vertical rotation rate to estimate love-wave dispersion curves and direction finding. *Bulletin of the Seismological Society of America*, 106(3), 1316–1330.
- **Wassermann, J.**, and M. Ohrnberger (2001), Automatic hypocenter determination of volcano induced seismic transients based on wave field coherence - an application to the 1998 eruption of Mt. Merapi, Indonesia, *J. Volcanol. Geoth. Res.*, 110, 57-77.