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CURRICULUM VITAE
Yannik Behr

Professional Experience

8/2016 - present	:	**GeoNet Volcano Science Operations Specialist at GNS Science, New Zealand**: Development of fast anomaly detection and reporting for volcano monitoring to facilitate enhanced volcano unrest and eruption identification. **Collaborators**: Nico Fournier, Steven Sherburn, Agnes Mazot
3/2012 - 5/2016	:	**Postdoctoral Fellow in real-time Seismology at the Swiss Seismological Service, ETH Zurich, Switzerland**: Implementation, performance analysis, and uncertainty quantification of Earthquake Early Warning systems. **Collaborators**: John Clinton, Georgia Cua, Carlo Cauzzi, Stefan Wiemer
7/2011 - 2/2012	:	**Seismologist at GNS Science, New Zealand**: Evaluation and implementation of signal processing routines for strong-motion records. **Collaborators**: Stephen Bannister, Graeme McVerry, John Zhao, Jim Cousins
12/2010 - 6/2011	:	**Postdoctoral Fellow in Ambient Noise Seismology at Victoria University of Wellington, New Zealand**: Establishing the relation between ambient noise source distributions and ocean wave characteristics in New Zealand. **Collaborators**: John Townend, Melissa Bowen, Stephen Bannister, Lionel Carter

Education

4/2007 - 5/2011	:	**PhD Student at Victoria University of Wellington, New Zealand**: Imaging New Zealand's crustal structure using ambient seismic noise recordings from permanent and temporary instruments. **Advisors**: John Townend, Martha Savage, Stephen Bannister
10/2000 - 3/2007	:	**Diploma Student in Geophysics at Ludwig-Maximilians University, Munich, Germany**: Determining the Green's function between stations of the Bavarian seismic network employing the correlation of diffuse wavefields. **Advisors**: Joachim Wassermann, Heiner Igel

Internships and Studies Abroad

4/2009	:	Working with Fan-Chi Lin, Yingjie Yang and Michael Ritzwoller on ambient noise tomography of New Zealand at the **University of Colorado at Boulder, USA**.
11/2005 - 2/2006	:	Internship at **LGIT, Université Joseph Fourier, Grenoble, France** within the work group of Michel Campillo, applying reciprocity principles to the correlations of coda waves in order to find the Green's function between earthquake locations.
11/2004 - 2/2005	:	Internship during the **austral summer-campaign of the Alfred-Wegener Institute (AWI) in Antarctica**: participation in radar measurements to determine ice-layer sequences and positioning of seismometers in the Kottas mountains for anisotropy studies.
9/2004	:	Internship on the **RV Polarstern**: participation in seismic and aeromagnetic measurements above the Yermak-Plateau in the Fram-Strait between Svalbard and Greenland.

Scholarships, Awards, and Invited Talks

2010	:	**Invited speaker**, 2010 Western Pacific Geophysics Meeting, Taipei, Taiwan
2009	:	**Best student poster**, Geosciences '09, Oamaru, New Zealand
2006	:	**Vice Chancellor's Strategic Research Scholarship**, Victoria University of Wellington, New Zealand

Teaching

Spring 2014 + 2015	:	Lecturer for "Timeseries Analysis for Environmental Physics and Geophysics", undergraduate level, ETH Zurich
Autumn 2010	:	Instructor for "Tectonics and Structural Geology", undergraduate level, Victoria University of Wellington

Professional Services

Convener	:	Advances and challenges for Earthquake Early Warning Systems, AGU, 2013
Organizer	:	Introductory workshop on ObsPy (www.obspy.org), a Python toolbox for Seismology
Reviewer	:	Geophysical Journal International, Pure and Applied Geophysics, Natural Hazards and Earth System Sciences, Comptes Rendus Geoscience, Bulletin of Earthquake Engineering

Computer Skills

Systems	:	Unix, Linux (Debian/Ubuntu), Microsoft Windows
Programming	:	Proficient in C++, Python, and Bash; grid computing (Sun grid engine); client/server applications with Apache's ActiveMQ toolkit; Ipython; SWIG; ctypes
Databases	:	PostgreSQL, SQLite
Version control	:	Git, Subversion

Languages

German	:	Native speaker
English	:	Fluent
French	:	Competent in speaking and writing

Publications in Peer-Reviewed Journals

2015	:	***An open-source Earthquake Early Warning display***, C. Cauzzi, <u>Y. Behr</u>, J. Clinton, P. Kästli, L. Elia, A. Zollo, *Seismological Research Letters*, 2016, doi:10.1007/s10518-016-9864-0
2015	:	***Real-Time Seismic Risk Mitigation at Nuclear Facilities through Earthquake Early Warning and Operational Earthquake Forecasting***, C. Cauzzi, <u>Y. Behr</u>, T. Le Guenan, J. Douglas, S. Auclair, J. Wössner, J. Clinton, S. Wiemer, *Bulletin of Earthquake Engineering*, 2016, doi:10.1007/s10518-016-9864-0
2015	:	***The Virtual Seismologist in SeisComP3 as an implementation model for Earthquake Early Warning algorithms***, <u>Y. Behr</u>, J. Clinton, C. Cauzzi, E. Hauksson, K. Jónsdóttir, C. Marius, A. Pinar, J. Salichon, E. Sokos, *Seismological Research Letters*, 2016, doi:10.1785/0220150235
2015	:	***Anatomy of an Earthquake Early Warning (EEW) alert: predicting time delays for an end-to-end EEW system***, <u>Y. Behr</u>, J. Clinton, P. Kästli, C. Cauzzi, R. Racine, M.-A. Meier, *Seismological Research Letters*, 2015, doi:10.1785/0220140179
2014	:	***Earthquakes in Switzerland and surrounding regions during 2013***, T. Diehl, J. Clinton, T. Kraft, S. Husen, K. Plenkers, A. Guilhelm, <u>Y. Behr</u>, C. Cauzzi, P. Kästli, F. Haslinger, D. Fäh,C. Michel, S. Wiemer, *Swiss Journal of Geosciences*, 2014, doi:10.1007/s00015-014-0171-y
2013	:	***Ambient seismic noise tomography of Canada and adjacent regions: Part I. Crustal structures*** H. Kao, <u>Y. Behr</u>, C. Currie, R. Hyndman, J. Townend, F.-C. Lin, M. H. Ritzwoller, S.-J. Shan, J. He, *Journal of Geophysical Research*, 2013, doi: 10.1002/2013JB010535
2013	:	***Source directionality of ambient seismic noise inferred from three-component beamforming*** <u>Y. Behr</u>, J. Townend, M. Bowen, L. Carter, R. Gorman, L. Brooks, S. Bannister, *Journal of Geophysical Research*, 2013, doi: 10.1029/2012JB009382
2012	:	***The benefit of hind-sight in observational science: retrospective seismological observations*** A. Curtis, <u>Y. Behr</u>, E. Entwistle, E. Galetti, J. Townend, S. Bannister, *Earth and Planetary Science Letters*, 2012, doi: 10.1016/j.epsl.2012.06.008
2011	:	***Crustal shear wave tomography of the Taupo Volcanic Zone, New Zealand, via ambient noise correlation between multiple three-component networks*** <u>Y. Behr</u>, J. Townend, S. Bannister, M. K. Savage, *Geochemistry, Geophysics, Geosystems*, 2011, doi: 10.1029/2010GC003385
2010	:	***Shear-velocity structure of the Northland Peninsula, New Zealand, inferred from ambient noise correlations*** <u>Y. Behr</u>, J. Townend, S. Bannister, M. K. Savage, *Journal of Geophysical Research*, 2010, doi: 10.1029/2009JB006737
2010	:	***ObsPy: A Python toolbox for seismology*** M. Beyreuther, R. Barsch, L. Krischer, T. Megies, <u>Y. Behr</u>, and J. Wassermann, *Seismological Research Letters*, 2010, doi: 10.1785/gssrl.81.3.530
2008	:	***The 26 May 2006 magnitude 6.4 Yagyakarta earthquake south of Mt. Merapi volcano: Did lahar deposits amplify ground shaking and thus lead to the disaster?*** T. R. Walter, R. Wang, B.-G. Luehr, J. Wassermann, <u>Y. Behr</u>, S. Parolai, A. Anggraini, E. Günther, M. Sobiesiak, H. Grosser, H.-U. Wetzel, C. Milkereit, P. J. K. Sri Brotopuspito, P. Harjadi, J. Zschau *Geochemistry, Geophysics, Geosystems*, 2008, doi: 10.1029/2007GC001810
2007	:	***Soft Volcanic Sediments Compound 2006 Java Earthquake Disaster***, T. R. Walter, R. Wang, B.-G. Lühr, J. Wassermann, <u>Y. Behr</u>, A. Anggraini, K. Sri Brotopuspito, P. Harjadi *Eos, Transactions American Geophysical Union*, 2007, doi: 10.1029/2007EO460002

Other Publications

2011	:	***Imaging New Zealand's crustal structure using ambient seismic noise recordings from permanent and temporary instruments***, <u>Y. Behr</u>, PhD thesis, Victoria University of Wellington, New Zealand
2009	:	***A grid-based facility for large-scale cross-correlation of continuous seismic data*** J. Townend, <u>Y. Behr</u>, K. Buckley, M. K. Savage, J. Hine, *Report to the New Zealand Earthquake Commission (EQC)*, 2009, available on request