

PERSONAL INFORMATION

Name: Niklas Linde

Date and place of birth: April 19, 1977 in Sweden

Civil status: married, one child (10 years)

Researcher unique identifier: RID: A-9440-2008

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CURRENT POSITION

2019- Full Professor in Environmental Geophysics, Faculty of Geosciences and the Environment (GSE), University of Lausanne (UNIL), Switzerland

EDUCATION

2001-2005 PhD in Solid Earth Geophysics (Characterization of hydrogeological media using electromagnetic geophysics; advisor Prof. L. B. Pedersen), Department of Earth Sciences, Uppsala University, Sweden

2003-2004 Guest at Lawrence Berkeley National Laboratory, Earth Sciences Division, Berkeley, USA

1997-2001 MSc in Aquatic and Environmental Engineering, Uppsala University, Sweden

PROFESSIONAL AND ACADEMIC EXPERIENCE

2013-2019 Associate Professor in Environmental Geophysics, UNIL

2008-2013 Assistant professor in Environmental Geophysics, UNIL

2006-2008 Post-doctoral fellow, Swiss Federal Institute of Technology Zurich (ETHZ), Institute of Geophysics, Zürich, Switzerland

2005-2006 Post-doctoral fellow, Paul Cézanne University, CNRS-CEREGE, Aix-en-Provence, France

ONGOING RESEARCH PROJECTS

2025-2029 Swiss National Science Foundation, GREECE: Geophysics-assisted Geophysics-assisted Rare Event Estimation in Changing Environments, PI, kCHF 729

MAJOR ADMINISTRATIVE TASKS

2021-2024 Dean of the Faculty of Geosciences and Environment, University of Lausanne.

EDITORIAL ACTIVITY

2019-2021 Associate Editor of Journal of Geophysical Research Solid Earth.

2013- 2017 Associate Editor of Journal of Hydrology



Niklas Linde, Lausanne 2025-03-27

(*Student mentored; #Postdoctoral scientist mentored)

Peer-reviewed articles

121. Hunziker, J., G. Meles#, and **N. Linde**, Crosshole ground-penetrating radar full-waveform inversion by combining optimal-transport and least-squares distances. *Journal of Applied Geophysics* (in press).
120. Friedli*, L., D. Ginsbourger, A. Doucet, and **N. Linde**, An energy-based model approach to rare event probability estimation. *SIAM-ASA Journal on Uncertainty Quantification* (in press).
119. Miele*, R., S. Levy*, **N. Linde**, A. Soares, and L. Azevedo, 2024. Deep generative networks for multivariate fullstack seismic data inversion using inverse autoregressive flows. *Computers & Geosciences*.
118. Fernandez Visentini*, A., and **N. Linde**, 2024. An electrical parameter characterizing solute heterogeneity: the mixing factor M . *Water Resources Research*, 60, e2023WR036059. doi.org/10.1029/2023WR036059
117. Levy*, S., L. Friedli*, G. Mariethoz, and **N. Linde**, 2024. Conditioning of multiple-point statistics simulations to indirect geophysical data. *Computers and Geosciences*, 287, 105581. https://doi.org/10.1016/j.cageo.2024.105581
116. Friedli*, L., and **N. Linde**, 2024. Rare event probability estimation for groundwater inverse problems with a two-stage Sequential Monte Carlo approach. *Water Resources Research*, 60, e2023WR036610. doi: 10.1029/2023WR036610
115. Amaya*, M., G. Meles#, S. Marelli and **N. Linde**, 2024. Multifidelity adaptive sequential Monte Carlo applied to geophysical inversion. *Geophysical Journal International*, 237, 788-804. https://doi.org/10.1093/gji/ggae040
114. Meles#, G., M. Amaya*, S. Levy*, S. Marelli and **N. Linde**, 2024. Bayesian tomography using polynomial chaos expansion and deep generative networks. *Geophysical Journal International*, 237, 31-48. https://doi.org/10.1093/gji/ggae026
113. Friedli*, L., and **N. Linde**, 2024. Solving geophysical inversion problems with intractable likelihoods: Linearized Gaussian approximations versus the correlated pseudo-marginal method. *Mathematical Geosciences*, 56, 55-75. https://doi.org/10.1007/s11004-023-10064-y
112. Hu#, K., H. Ren, Q. Huang, L. Zeng, K. Butler, D. Jougnot, **N. Linde** and K. Holliger, 2023. Water table and permeability estimation from multi-channel seismoelectric spectral ratios. *Journal of Geophysical Research – Solid Earth*, 128, e2022JB025505. doi: 10.1029/2022JB025505
111. Friedli*, L., **N. Linde**, D. Ginsbourger, A. Fernandez Visentini, and A. Doucet, 2023. Inference of geostatistical hyperparameters with the correlated pseudo-marginal method. *Advances in Water Resources*, 173, 104402. doi:10.1016/j.advwatres.2023.104402
110. Hermans, T., P. Goderniaux, D. Jougnot, F. Fleckenstein, P. Brunner, F. Nguyen, **N. Linde**, J. A. Huisman, O. Bour, J. L. Lopez Alvis, R. Hoffmann, A. Palacios, A.-K. Cooke, A. Pardo-Alvarez, L. Blazevic, B. Pouladi, P. Haruzi, M. Kenshlikova, P. Davy, and T. Le Borgne, 2023. Advancing measurements and representations of subsurface heterogeneity and dynamic processes: towards 4D hydrogeology. *Hydrology and Earth System Sciences*. 27, 255-287. doi:10.5194/hess-27-255-2023.
109. Levy*, S., E. Laloy, and **N. Linde**, 2023. Variational Bayesian inference with complex geostatistical priors using inverse autoregressive flows. *Computers and Geosciences*. 171, 105263. doi:10.1016/j.cageo.2022.105263

108. Traveletti*, C., D. Ginsbourger, and **N. Linde**. 2023. Uncertainty quantification and experimental design for large-scale linear inverse problems under Gaussian process priors. *SIAM-ASA Journal on Uncertainty Quantification*, 11:1, 168-198. doi:10.1137/21M1445028
107. Fernandez Visentini*, A., P. de Anna, D. Jougnot, T. Le Borgne, Y. Méheust, and **N. Linde**. 2023. Electrical signatures of diffusion-limited mixing: Insights from a milli-fluidic tracer experiment. *Transport in Porous Media*, 146, 435-461. doi:10.1007/s11242-021-01607-0
106. Amaya*, M., **N. Linde**, and E. Laloy. 2022. Hydrogeological multiple-point statistics inversion by adaptive sequential Monte Carlo. *Advances in Water Resources*, 166, 104252. doi: 10.1016/j.advwatres.2022.104252
105. Meles#, G. A., **N. Linde**, and S. Marelli. 2022. Bayesian tomography with prior-knowledge-based parametrization and surrogate modeling. *Geophysical Journal International*, 231, 673-691. doi:10.1093/gji/ggac214
104. Thornton*, J., R. Therrien, G. Mariethoz, **N. Linde**, and P. Brunner. 2022. Simulating fully-integrated hydrological dynamics in complex Alpine headwaters: potential and challenges. *Water Resources Research*, 58, e2020WR029390. doi:10.1029/2020WR029390. *Selected for 2022 WRR Editors' Choice Awards (top 1% of published papers)*
103. Romero Ruiz*, A., **N. Linde**, L. Baron, D. Breitenstein, T. Keller and D. Or. 2022. Lasting effects of soil compaction on soil water regime confirmed by geoelectrical monitoring. *Water Resources Research*, 58, e2021WR030696. doi:10.1029/2021WR030696.
102. Levy*, S., J. Hunziker, E. Laloy, J. Irving, and **N. Linde**. 2022. Using deep generative neural networks to account for model errors in Markov chain Monte Carlo inversion. *Geophysical Journal International*, 228, 1098-1118. doi: 10.1093/gji/ggab391.
101. Friedli*, L., **N. Linde**, D. Ginsbourger, and A. Doucet. 2022. Lithological tomography with the correlated pseudo-marginal method. *Geophysical Journal International*. 228, 839-856. doi: 10.1093/gji/ggab381.
100. Klepikova#, M., Y. Méheust, C. Roques, and **N. Linde**. 2021. Heat transport by flow through rough rock fractures: a numerical investigation. *Advances in Water Resources*, 156, 104042. doi: 10.1016/j.advwatres.2021.103960.
99. Molron*, J., **N. Linde**, P. Davy, C. Darcel, J.-O. Selroos, T. Le Borgne, and D. Doolaege. 2021. GPR-inferred fracture aperture widening in response to a high-pressure tracer injection test at the Äspö Hard Rock Laboratory, Sweden. *Engineering Geology*, 292, 106249. doi: 10.1016/j.enggeo.2021.106249.
98. Pouladi*, B., **N. Linde**, L. Longuevergne, and O. Bour. 2021. Individual and joint inversion of head and flux data by geostatistical hydraulic tomography. *Advances in Water Resources*, 154, 103960. doi: 10.1016/j.advwatres.2021.103960.
97. Romero-Ruiz*, A., **N. Linde**, L. Baron, S. Solazzi, T. Keller, and D. Or. 2021. Seismic signatures of persistent soil compaction. *Vadose Zone Journal*. 20:e20140. doi:10.1002/vzj2.20140
96. Amaya*, M., **N. Linde**, and E. Laloy. 2021. Adaptive sequential Monte Carlo for posterior inference and model selection among complex geological priors. *Geophysical Journal International*, 226, 1220-1238. doi: 10.1093/gji/ggab170
95. Laloy, E., **N. Linde** and D. Jacques. 2021. Approaching geoscientific inverse problems with vector-to-image domain transfer networks. *Advances in Water Resources*, 152, 103917. doi: 10.1016/j.advwatres.2021.103917
94. Fernandez*, A., **N. Linde**, T. Le Borgne, and M. Dentz. 2020. Inferring geostatistical properties of hydraulic conductivity fields from saline tracer tests and equivalent

- electrical conductivity time-series. *Advances in Water Resources*, 146, 103758. doi: 10.1016/j.advwatres.2020.103758.
93. Molron*, J., **N. Linde**, L. Baron, J. O. Selroos, C. Darcel, and P. Davy. 2020. Which fractures are imaged with Ground Penetrating Radar? Results from an experiment in the Äspö Hardrock Laboratory, Sweden. *Engineering Geology*, 273, 105674. doi: 10.1016/j.enggeo.2020.105674.
 92. Blazevic*, L. A., L. Bodet, S. Pasquet, **N. Linde**, D. Jougnot, and L. Longuevergne. 2020. Time-lapse seismic and electrical monitoring of the vadose zone during a controlled infiltration experiment at the Ploemeur Hydrological Observatory, France. *Water*, 12, 1230. doi:10.3390/w12051230.
 91. Palacios*, A., J. J. Ledo, **N. Linde**, L. Luquot, F. Bellmunt, A. Folch, A. Marcuello, P. Queralt, P. A. Pezard, L. Martinez, D. Bosch, and J. Carrera. 2020, Time-lapse cross-hole electrical resistivity tomography (CHERT) for monitoring seawater intrusion dynamics in a Mediterranean aquifer. *Hydrology and Earth Systems Sciences*, 24, 2121-2139. doi: 10.5194/hess-24-2121-2020.
 90. Hu*, K., D. Jougnot, M.C. Looms, and **N. Linde**. 2020, Advancing quantitative understanding of self-potential signatures in the critical zone through long-term monitoring. *Journal of Hydrology*, 585, 124771. doi: 10.1016/j.jhydrol.2020.124771
 89. Laloy, E., **N. Linde**, C. Ruffino, R. Hérault, G. Gasso, and D. Jacques. 2019, Gradient-based deterministic inversion of geophysical data with generative adversarial networks: Is it feasible? *Computers and Geoscience*, 133, 104333. doi: 10.1016/j.cageo.2019.104333.
 88. de Pasquale*, G., **N. Linde**, and A. Greenwood. 2019, Joint probabilistic inversion of DC resistivity and seismic refraction data applied to bedrock/regolith interface delineation. *Journal of Applied Geophysics*, 170, 103839. doi:10.1016/j.jappgeo.2019.103839.
 87. Brunetti*, C., M. Bianchi, G. Piroth#, and **N. Linde**. 2019, Hydrogeological model selection among complex spatial priors. *Water Resources Research*, 55, 6729-6753. doi: 10.1029/2019WR024840
 86. Irazzaval*, I., M. Werder, **N. Linde**, J. Irving, F. Herman, and G. Mariethoz. 2019, Bayesian inference of subglacial channel structures from water-pressure and tracer-transit-time data: A numerical study based on a 2-D geostatistical modelling approach. *Journal of Geophysical Research-Earth Surface*, 124, 1625-1644. doi: 10.1029/2018JF004921.
 85. Hunziker#, J, E. Laloy, and **N. Linde**. 2019, Bayesian full-waveform tomography with application to crosshole ground penetrating radar data. *Geophysical Journal International*, 218, 913-931. doi:10.1093/gji/ggz194
 84. Nussbaumer*, R., **N. Linde**, G. Mariethoz, and K. Holliger. 2019, Simulation of fine-scale electrical conductivity fields using resolution-limited tomograms and area-to-point kriging. *Geophysical Journal International*, 218, 1322-1335. doi: 10.1093/gji/ggz185.
 83. de Pasquale*, G., **N. Linde**, J. Doetsch, and S. Holbrook. 2019, Probabilistic inference of subsurface heterogeneity and interface geometry using geophysical data. *Geophysical Journal International*, 217, 816-831. doi:10.1093/gji/ggz055
 82. Poret, A., A. Finizola, T. Ricci, G. Pasquale Ricciardi, **N. Linde**, G. Mauri, S. Barde-Cabusson, X. Guichet, L. Baron, A. Shakas, M. Gouthier, G. Levieux, J. Morin, E. Roulleau, F. Sortino, R. Vassallo, M. Antonio di Vito, and G. Orsi. 2019, The buried boundary of Vesuvius 1631 caldera revealed by present-day diffuse degassing. *Journal of Volcanology and Geothermal Research*, 375, 43-56. doi: 10.1016/j.jvolgeores.2019.01.029.
 81. Piroth#, G., E. Huber, J. Irving, and **N. Linde**. 2019, Reduction of conceptual model uncertainty using ground-penetrating radar profiles: Field-demonstration for a braided-river aquifer. *Journal of Hydrology*, 571, 254-264. doi:10.1016/j.jhydrol.2019.01.047

80. Romero-Ruiz*, A., **N. Linde**, T. Keller, and D. Or. 2018, A review of geophysical methods for soil structure characterization. *Reviews of Geophysics*, 56, 672-697. doi:10.1029/2018RG000611. *The front page of the journal issue was taken from our paper.*
79. Shakas*, A., **N. Linde**, T. Le Borgne, and O. Bour. 2018, Probabilistic inference of fracture-scale flow paths and aperture distribution from hydrogeophysically-monitored tracer tests. *Journal of Hydrology*, 567, 305-319. doi: 10.1016/j.jhydrol.2018.10.004.
78. Ghosh, U., T. Le Borgne, D. Jougnot, **N. Linde**, and Y. Méheust. 2018, Geoelectrical signatures of reactive mixing: A theoretical assessment. *Geophysical Research Letters*, 45, 3489-3498. doi:10.1002/2017GL076445
77. Jougnot#, D., J. Jimenez-Martinez, R. Legendre, T. Le Borgne, Y. Méheust, and **N. Linde**. 2018, Impact of small-scale saline tracer heterogeneity on electrical resistivity monitoring under saturated and partially saturated conditions: insights from geoelectrical millifluidic experiments. *Advances in Water Resources*, 113, 295-309. doi: 10.1016/j.advwatres.2018.01.014
76. Laloy, E., R. Hérault, J. Lee, D. Jacques, and **N. Linde**, 2018. Training-image based geostatistical inversion using a spatial generative adversarial neural network. *Water Resources Research*, 54, 381-406. doi:10.1002/2017WR022148
75. Brunetti*, C., and **N. Linde**, 2018. Impact of petrophysical uncertainty on Bayesian hydrogeophysical inversion and model selection. *Advances in Water Resources*, 111, 346-359. doi:10.1016/j.advwatres.2017.11.028
74. **Linde, N.**, D. Ginsbourger, J. Irving, F. Nobile, and A. Doucet, 2017b. On uncertainty quantification in hydrogeology and hydrogeophysics. *Advances in Water Resources*, 110, 161-181. doi: 10.1016/j.advwatres.2017.10.014
73. Laloy, E., R. Hérault, J. Lee, D. Jacques, and **N. Linde**, 2017. Inversion using a new low-dimensional representation of complex binary geological media based on a deep neural network. *Advances in Water Resources*, 110, 387-405. doi:10.1016/j.advwatres.2017.09.029
72. **Linde, N.**, T. Ricci, L. Baron, A. Shakas*, and G. Berrino, 2017a. The 3-D structure of the Somma-Vesuvius volcanic complex (Italy) inferred from new and historic gravimetric data. *Scientific Reports*, 7, 8434. doi:10.1038/s41598-017-07496-y
71. Hunziker#, J., E. Laloy, and **N. Linde**, 2017. Inference of multi-Gaussian permittivity fields by probabilistic inversion of crosshole ground-penetrating radar data. *Geophysics*, 82(5), H25-H40. doi:10.1190/geo2016-0347.1
70. Day-Lewis, F. D., **N. Linde**, R. Haggerty, K. Singha, and M. Briggs, 2017. Pore-network modeling of the electrical signature of solute transport in dual-domain media. *Geophysical Research Letters*, 44, 4908-4916. doi:10.1002/2017GL073326
69. Shakas*, A., **N. Linde**, L. Baron, J. Selker, M.-F., Gerard, N. Lavenant, O. Bour, and T. Le Borgne, 2017b. Neutrally-buoyant tracers in hydrogeophysics: Field demonstration in fractured rock. *Geophysical Research Letters*. 44. doi:10.1002/2017GL073368
68. Shakas*, A. and **N. Linde**, 2017a. Apparent apertures from ground penetrating radar data and their relation to heterogeneous aperture fields. *Geophysical Journal International*, 209(3), 1418-1430. doi: 10.1093/gji/ggx100
67. Keller, T., T. Colombi, S. Ruiz, M. P. M. Manalili, J. Rek, V. Stadelmann, H. Wunderli, D. Breitenstein, R. Reiser, H.-R. Oberholzer, S. Schymanski, A. Romero-Ruiz*, **N. Linde**, P. Weisskopf, A. Walter, and D. Or, 2017. Long-term Soil Structure Observatory for monitoring post-compaction evolution of soil structure. *Vadose Zone Journal*, 16. doi:10.2136/vzj2016.11.0118
66. Brunetti*, C., **N. Linde**, and J. A. Vrugt, 2017. Bayesian model selection in hydrogeophysics: Application to conceptual subsurface models of the South Oyster

- Bacterial Transport Site, Virginia, USA. *Advances in Water Resources*, 102, 127-141. doi: 10.1016/j.advwatres.2017.02.006
65. Pirot#, G., **N. Linde**, J. Bradford, and G. Mariethoz, 2017. Efficient probabilistic inversion with graph cuts: Application to the Boise Hydrogeophysical Research Site. *Water Resources Research*, 53, 1231–1250. doi: 10.1002/2016WR019347
 64. de Pasquale*, G. and **N. Linde**, 2017. On structure-based priors in Bayesian geophysical inversion. *Geophysical Journal International*, 208(3), 1342-1358. doi:10.1093/gji/hhw458
 63. Li, X., G. Mariethoz, D. Lu, and **N. Linde**, 2016. Patch-based iterative conditional geostatistical simulation using graph cuts. *Water Resources Research*, 52, 6297-6320. doi: 10.1002/2015WR018378
 62. Roubinet#, D., **N. Linde**, D. Jougnot, and J. Irving, 2016. Streaming potential modeling in fractured rock: Insights into the identification of hydraulically active fractures. *Geophysical Research Letters*, 43, 4937-4944. doi:10.1002/2016GL068669
 61. Laloy, E., **N. Linde**, D. Jacques, and G. Mariethoz, 2016. Merging parallel tempering with sequential geostatistical resampling for improved posterior exploration of high-dimensional subsurface categorical fields. *Advances in Water Resources*, 90, 57-69. doi: 10.1016/j.advwatres.2016.02.008
 60. Shakas*, A., **N. Linde**, L. Baron, O. Bochet, O. Bour, T. Le Borgne, 2016. Hydrogeophysical characterization of transport processes in fractured rock by combining push-pull tracer tests and single-hole ground penetrating radar. *Water Resources Research*, 52, 938-953. doi:10.1002/2015WR017837
 59. Zahner*, T., T. Lochbühler*, G. Mariethoz, and **N. Linde**, 2016. Image synthesis with graph cuts: a fast model proposal mechanism in probabilistic inversion. *Geophysical Journal International*, 204, 1179-1190. doi:10.1093/gji/ggv517
 58. **Linde**, N., T. Lochbühler*, M. Dogan, R. L. Van Dam, 2015b, Tomogram-based comparison of geostatistical models: Application to the MACro-Dispersion Experiment (MADE) site. *Journal of Hydrology*, 531, 543-556. doi:10.1016/j.jhydrol.2015.10.073
 57. **Linde**, N., P. Renard, T. Mukerji, and J. Caers, 2015a. Geological realism in hydrogeological and geophysical inverse modeling: a review. *Advances in Water Resources*, 86, 86-101. doi: 10.1016/j.advwatres.2015.09.019
 56. Rosas-Carbajal*, M., **N. Linde**, J. Peacock, F. Zyserman, T. Kalscheuer, and S. Thiel, 2015, Probabilistic three-dimensional time-lapse inversion of magnetotelluric data: Application to an enhanced geothermal system. *Geophysical Journal International*, 203, 1946-1960. doi:10.1093/gji/ggv406
 55. Mariethoz, G., **N. Linde**, D. Jougnot#, and H. Rezae, 2015, Feature-preserving interpolation and filtering of environmental time-series. *Environmental Modelling & Software*, 72, 71–76. doi: 10.1016/j.envsoft.2015.07.001
 54. Laloy, E., **N. Linde**, D. Jacques, and J. A. Vrugt, 2015, Probabilistic inference of multi-Gaussian fields from indirect hydrological data using circulant embedding and dimensionality reduction. *Water Resources Research*, 51, 4224-4243. doi: 10.1002/2014WR016395
 53. Shakas*, A., and **N. Linde**, 2015, Effective modeling of ground penetrating radar in fractured media using analytic solutions for propagation, thin-bed interaction and dipolar scattering. *Journal of Applied Geophysics*, 116, 206-214. doi:10.1016/j.jappgeo.2015.03.018
 52. Lochbühler*, T., J. A. Vrugt, M. Sadegh, and **N. Linde**, 2015, Summary statistics from training images as prior information in probabilistic inversion. *Geophysical Journal International*, 201, 157-171. doi:10.1093/gji/ggv008.
 51. Monachesi, L. B., J. G. Rubino, M. Rosas-Carbajal*, D. Jougnot#, **N. Linde**, Quintal, B., Holliger, K., 2015, An analytical study of seismoelectric signals produced by 1D

- mesoscopic heterogeneities. *Geophysical Journal International*, 201, 329-342. doi: 10.1093/gji/ggu482
50. Jougnot#, D., **N. Linde**, E. Haarder, and M. C. Looms, 2015, Monitoring of saline tracer movement with vertically distributed self-potential measurements at the HOBE agricultural site, Voulund, Denmark. *Journal of Hydrology*, 521, 314-327. doi: 10.1016/j.jhydrol.2014.11.041
 49. Schirmer, M., J. Luster, **N. Linde** et al., 2014, River restoration: morphological, hydrological, biogeochemical and ecological changes and challenges. *Hydrological Earth Systems Sciences (HESS)*, 18, 2449-2462. doi:10.5194/hess-18-2449-2014
 48. Lochbühler*, T., S. J. Breen, R. L. Detwiler, J. A. Vrugt, and **N. Linde**. 2014b, Probabilistic electrical resistivity tomography of a CO₂ sequestration analog. *Journal of Applied Geophysics*, 107, 80-92. doi:10.1016/j.jappgeo.2014.05.013
 47. Lochbühler*, T., G. Pirot, J. Straubhaar, and **N. Linde**, 2014a, Conditioning of multiple-point statistics facies simulations to tomographic images. *Mathematical Geosciences*, 46, 625-645. doi:10.1007/s11004-013-9484-z
 46. **Linde**, N., L. Baron, T. Ricci, A. Finizola, A. Revil, F. Muccini, L. Cocchi, and C. Carmisciano, 2014, 3D density structure and geological evolution of Stromboli volcano (Aeolian Islands, Italy) inferred from land-based and marine gravity data. *Journal of Volcanology and Geothermal Research*, 273, 58-69. doi:10.1016/j.volgeores.2014.01.006
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 44. **Linde** N., 2014, Falsification and corroboration of conceptual hydrological models using geophysical data. *WIREs Water*, 1. doi:10.1002/wat2.1011
 43. Dorn*, C., N. Linde, T. Le Borgne, O. Bour, and J.-R. de Dreuzy, 2013, Conditioning of stochastic 3-D fracture networks to hydrological and geophysical data. *Advances in Water Resources*, 62, 79-89. doi: 10.1016/j.advwatres.2013.10.005
 42. Klotzsche, A., J. van der Kruk, **N. Linde**, J. Doetsch, and H. Vereecken, 2013, 3D characterization of high-permeability zones in a gravel aquifer using 2D crosshole GPR full-waveform inversion and waveguide detection. *Geophysical Journal International*, 195, 932-944. doi: 10.1093/gji/ggt275
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35. Laloy, E., **N. Linde**, and J. A. Vrugt, 2012, Mass conservative three-dimensional water tracer distribution from MCMC inversion of time-lapse GPR data. *Water Resources Research*, 48, W07510. doi:10.1029/2011WR011238
34. Rosas Carbajal*, M., **N. Linde**, and T. Kalscheuer, 2012, Focused time-lapse inversion of radio and audio magnetotelluric data. *Journal of Applied Geophysics*, 84, 29-38. doi: 10.1016/j.jappgeo.2012.05.012
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1. Moorkamp, M., P. Lelièvre, **N. Linde**, and A. Khan (2016), *Integrated Imaging of the Earth: Theory and Applications*. John Wiley & Sons, Inc., 270 pages, Hoboken, New Jersey. doi: 10.1002/9781118929063

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