



# Florian M. Wagner

## Curriculum vitae

### Professional Experience

- since Sept. 2018 **Visiting scholar**, *Earth & Environmental Sciences Area, Lawrence Berkeley National Laboratory, Berkeley, CA, USA.*  
Joint inversion of seismic refraction and electrical resistivity data.
- since Aug. 2016 **Postdoctoral research associate**, *University of Bonn, Department of Geophysics, Bonn, Germany.*  
Research on joint and process-based imaging for permafrost characterization and monitoring as well as teaching & theses supervision on Bachelor and Master level.
- Nov. 2011 **Research associate**, *GFZ German Research Centre for Geosciences, Section 6.3*  
– May 2016 - *Geological Storage, Potsdam, Germany.*  
Research on geoelectrical CO<sub>2</sub> monitoring, field experiments, server administration.

### Education

- 2012–2016 **Doctor of Sciences**, *ETH Zurich, Department of Earth Sciences.*  
Supervisors: Prof. Dr. Hansruedi Maurer and Dr. Cornelia Schmidt-Hattenberger (GFZ)  
Dissertation: [www.diss.fwagner.info](http://www.diss.fwagner.info)
- 2009 –2011 **Master of Science**, *IDEA League: TU Delft, ETH Zurich, RWTH Aachen.*  
Joint M.Sc. in Applied Geophysics (<http://www.idealeague.org/geophysics>)
- 2006–2009 **Bachelor of Science**, *RWTH Aachen University.*  
B.Sc. in Georesources Management

### Scientific interests

- Geophysical monitoring of subsurface fluid migration
- Permafrost characterization
- Tomographic experimental design
- Numerical modeling and (process-based/joint) inversion
- Scientific software development ([www.pygimli.org](http://www.pygimli.org))

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## Teaching

- 2016 – 2018 University of Bonn
- *Environmental geophysics*, Lecture, B.Sc.
  - *Inverse modeling*, Lecture, M.Sc.
  - *Hydrogeophysical process simulation*, Block course, M.Sc.
  - *Applied hydrogeophysics*, Seminar & field course, M.Sc.
  - Supervision of five Bachelor and two Master theses
- 2013 – 2015 ETH Zurich
- *Geophysical field work and data processing*, Field course & block course, M.Sc.
  - Supervision of a master thesis and committee member during oral defense
- Other
- *Modeling & inversion with pyGIMLi*, One-day course, Univ. of Leipzig, Sept. 2016
  - *Scientific computing with Python*, One-day course, GFZ Potsdam, Nov. 2012

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## Scholarships & Awards

- Sept. 2017 *Wasser-Monitoring-Preis* (50.000 €) awarded by the Dr. Erich Ritter foundation in cooperation with the Water Science Alliance e.V. ([www.deutsches-stiftungszentrum.de/aktuelles/2017\\_09\\_12\\_wasser-monitoring-preis](http://www.deutsches-stiftungszentrum.de/aktuelles/2017_09_12_wasser-monitoring-preis))
- Apr. 2016 1<sup>st</sup> place in category "EGU Talk" at the 11<sup>th</sup> annual GFZ PhD Day, Potsdam, Germany
- Sept. 2014 Best oral presentation award at the 4<sup>th</sup> Science Forum of the Helmholtz-Alberta-Initiative ([www.helmholtz-alberta.org](http://www.helmholtz-alberta.org)), Edmonton, Canada
- Sept. 2013 Best oral presentation award at the 3<sup>rd</sup> Science Forum of the Helmholtz-Alberta-Initiative, Edmonton, Canada
- Sept. 2012 Best oral presentation award at the 2<sup>nd</sup> Science Forum of the Helmholtz-Alberta-Initiative, Potsdam, Germany
- 2009–2011 Scholarship from the education fund of North Rhine-Westphalia
- 2009–2011 Private scholarship from DEA Deutsche Erdoel AG ([www.dea-group.com/en](http://www.dea-group.com/en))

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

## Invited conference contributions

- Wagner, F. M.**, Wiese, B., Schmidt-Hattenberger, C., Maurer, H. (2016): Insights on CO<sub>2</sub> Migration Based on a Multi-physical Inverse Reservoir Modeling Framework. 78<sup>th</sup> EAGE Conference & Exhibition, 30 May - 2 June 2016, Vienna, WS10-Quantitative Data Integration and Joint Inversion from Surface to Reservoir, DOI:10.3997/2214-4609.201601659.
- Wagner, F. M.**, Rücker, C., Günther, T. (2017): Reproducible hydrogeophysical inversions through the open-source library *pyGIMLi*. AGU Fall Meeting, New Orleans, 11-15 Dec 2017, Open-Source Software in the Geosciences (NS41B-0016), DOI:10.5281/zenodo.1095621.

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## Journal articles

2018

- Wagner, F. M.**, Wiese, B. (2018): Fully coupled inversion on a multi-physical reservoir model - Part II: The Ketzin CO<sub>2</sub> storage reservoir. *International Journal of Greenhouse Gas Control*, 75, 273-281, DOI:10.1016/j.ijggc.2018.04.009. <https://authors.elsevier.com/c/1XN7o6E2M2gCpK>  Download PDF
- Wiese, B., **Wagner, F. M.**, Norden, B., Maurer, H., Schmidt-Hattenberger, C. (2018): Fully coupled inversion on a multi-physical reservoir model - Part I: Theory and concept. *International Journal of Greenhouse Gas Control*, 75, 262-272, DOI: 10.1016/j.ijggc.2018.05.013. <https://authors.elsevier.com/c/1XN7o6E2M2gCam>  Download PDF
- Uhlemann, S., Wilkinson, P., Maurer, H., **Wagner, F. M.**, Johnson, T., Chambers, J. (2018): Optimized survey design for Electrical Resistivity Tomography: combined optimization of measurement configuration and electrode placement. *Geophysical Journal International*, 214, 108-121, DOI:10.1093/gji/ggy128.

## 2017

Wiese, B., **Wagner, F. M.**, Norden, B., Schmidt-Hattenberger, C. (2017): Fully Coupled Hydrogeophysical Inversion of Hydraulics, Gas Pressure and Geoelectrics. *Energy Procedia*, 114, 3588-3596, DOI:10.1016/j.egypro.2017.03.1490. <http://www.sciencedirect.com/science/article/pii/S1876610217316843?via%3Dihub#> <i class="icon-external-link" style="color:green" title="Download PDF"></i></a>

Schmidt-Hattenberger, C., Bergmann, P., Labitzke, T., Pommerencke, J., Rippe, D., **Wagner, F. M.**, Wiese, B. (2017): Monitoring the Complete Life-cycle of a CO<sub>2</sub> Storage Reservoir - Demonstration of Applicability of Geoelectrical Imaging. *Energy Procedia*, 114, 3948-3955, DOI:10.1016/j.egypro.2017.03.1526. <http://www.sciencedirect.com/science/article/pii/S18766102173172> class="icon-external-link" style="color:green" title="Download PDF"></i></a>

Rücker, C., Günther, T., **Wagner, F. M.** (2017): pyGIMLi: An open-source library for modelling and inversion in geophysics. *Computers and Geosciences*, 109, 106-123, DOI:10.1016/j.cageo.2017.07.011. <http://www.sciencedirect.com/science/article/pii/S0098300417300584-main.pdf> <i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>

Bergmann, P., Schmidt-Hattenberger, C., Labitzke, T., **Wagner, F. M.**, Just, A., Flechsig, C., Rippe, D. (2017): Fluid injection monitoring using electrical resistivity tomography - five years of CO<sub>2</sub> injection at Ketzin, Germany. *Geophysical Prospecting*, 65, 859-875, DOI:10.1111/1365-2478.12426.

## 2016

Schmidt-Hattenberger, C., Bergmann, P., Labitzke, T., **Wagner, F. M.**, Rippe, D. (2016): Permanent crosshole electrical resistivity tomography (ERT) as an established method for the long-term CO<sub>2</sub> monitoring at the Ketzin pilot site. *International Journal of Greenhouse Gas Control*, 52, 432-448, DOI:10.1016/j.ijggc.2016.07.024.

Bergmann, P., Diersch, M., Götz, J., Ivandic, M., Ivanova, A., Juhlin, C., Kummerow, J., Liebscher, A., Lüth, S., Meekes, S., Norden, B., Schmidt-Hattenberger, C., **Wagner, F. M.**, Zhang, F. (2016): Review on geophysical monitoring of CO<sub>2</sub> injection at Ketzin, Germany. *Journal of Petroleum Science and Engineering*, 139, 112-136, DOI:10.1016/j.petrol.2015.12.007.

## 2015

**Wagner, F. M.**, Bergmann, P., Rücker, C., Wiese, B., Labitzke, T., Schmidt-Hattenberger, C., Maurer, H. (2015): Impact and mitigation of borehole related effects in permanent crosshole resistivity imaging: An example from the Ketzin CO<sub>2</sub> storage site. *Journal of Applied Geophysics*, 123, 102-111, DOI:10.1016/j.jappgeo.2015.10.005. <http://www.sciencedirect.com/journal/journal-of-applied-geophysics/article/pii/S0021999115300000> class="icon-file-pdf-o" title="Download PDF" style="color:green"></i></a>

**Wagner, F. M.**, Günther, T., Schmidt-Hattenberger, C., Maurer, H. (2015): Constructive optimization of electrode locations for target-focused resistivity monitoring. *GEOPHYSICS*, 80, E29-E40, DOI:10.1190/geo2014-0214.1. <http://gfzpublic.gfz-potsdam.de/pubman/item/escidoc:838894:3/component/escidoc:860894/838894.pdf> <i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>

## 2014

Schmidt-Hattenberger, C., Bergmann, P., Labitzke, T., **Wagner, F. M.** (2014): CO<sub>2</sub> Migration Monitoring by Means of Electrical Resistivity Tomography (ERT) - Review on Five Years of Operation of a Permanent ERT System at the Ketzin Pilot Site. *Energy Procedia*, 63, 4366-4373, DOI:10.1016/j.egypro.2014.11.471. [http://ac.els-cdn.com/S1876610214022863/1-s2.0-S1876610214022863-main.pdf?\\_tid=6584ff0c-dee0-11e4-ae8f-00000aab0f6c&acdnat=1428601788\\_f349c1da12b8ef5bc535f685e1f28002](http://ac.els-cdn.com/S1876610214022863/1-s2.0-S1876610214022863-main.pdf?_tid=6584ff0c-dee0-11e4-ae8f-00000aab0f6c&acdnat=1428601788_f349c1da12b8ef5bc535f685e1f28002) class="icon-external-link" style="color:green" title="Download PDF"></i></a>

## 2013

**Wagner, F. M.**, Möller, M., Schmidt-Hattenberger, C., Kempka, T., Maurer, H. (2013): Monitoring freshwater salinization in analog transport models by time-lapse electrical resistivity tomography. *Journal of Applied Geophysics*, 89, 84-95, DOI:10.1016/j.jappgeo.2012.11.013. <http://www.sciencedirect.com/journal/journal-of-applied-geophysics/article/pii/S0021999113000000> class="icon-file-pdf-o" title="Download PDF" style="color:green"></i></a>

Schmidt-Hattenberger, C., Bergmann, P., Bösing, D., Labitzke, T., Möller, M., Schröder, S., **Wagner, F. M.**, Schütt, H. (2013): Electrical Resistivity Tomography (ERT) for Monitoring of CO<sub>2</sub> Migration - from Tool Development to Reservoir Surveillance at the Ketzin Pilot Site. *Energy Procedia*, 37, 4268-4275, DOI:10.1016/j.egypro.2013.06.329. <http://www.sciencedirect.com/science/article/pii/S1876610213005729/pdf?md5=b41ff316daec2847851220537099827f&pid=1-s2.0-S1876610213005729-main.pdf> <i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>

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## Conference contributions

## 2018

Mollaret, C., **Wagner, F. M.**, Hilbich, C., Hauck, C. (2018): Ice and liquid water saturations jointly inverted from electrical and refraction seismic datasets in mountain permafrost. 5<sup>th</sup> European Conference on Permafrost (EUCOP 2018), Chamonix-Mont Blanc, France, 23<sup>th</sup> June - 1<sup>st</sup> July 2018. [Download PDF](https://hal.archives-ouvertes.fr/hal-01816115/)

Manhaeghe, T., **Wagner, F. M.**, Dumont, G., Garré, S. (2018): Evaluation of the Effect of Micro-Topography of a Potato Field on ERT to Assess Soil Moisture Patterns in Sandy Soil. Near Surface Geoscience 2018 - the 24<sup>th</sup> European Meeting of Environmental and Engineering Geophysics, Near Surface Geoscience (9-13 September, Porto, Portugal), DOI:10.3997/2214-4609.201802627.

Hauck, C., Kemna, A., Weigand, M., **Wagner, F. M.**, Pellet, C., Mollaret, C., Hoelzle, M., Hilbich, C. (2018): Monitoring spatio-temporal infiltration pattern and its interaction with permafrost thaw using electrical resistivity and self-potential measurements at Schilthorn, Swiss Alps. EGU General Assembly 2018, Vienna. [Download PDF](https://meetingorganizer.copernicus.org/EGU2018/EGU2018010780.pdf)

## 2017

**Wagner, F. M.**, Rücker, C., Günther, T. (2017): Reproducible hydrogeophysical inversions through the open-source library `pyGIMLi`. AGU Fall Meeting, New Orleans, 11-15 Dec 2017, Open-Source Software in the Geosciences (NS41B-0016), DOI:10.5281/zenodo.1095621 (invited). [Download PDF](https://agu17.pygimli.org/)

**Wagner, F. M.**, Weigand, M., Kemna, A. (2017): Removal of outliers and electrode effects from spatial self-potential monitoring data to elucidate subsurface process dynamics. AGU Fall Meeting, New Orleans, 11-15 Dec 2017, Data Integration, Inverse Methods, and Data Valuation Across a Range of Scales in Hydrogeophysics (H31B-1502). [Download PDF](https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/270379)

**Wagner, F. M.**, Weigand, M., Kemna, A. (2017): Identification of outliers, electrode effects and process dynamics in electrical self-potential monitoring data. 4<sup>th</sup> International Workshop on Geoelectrical Monitoring, Nov. 22-24, Vienna. [Download PDF](https://www.geologie.ac.at/fileadmin/user_upload/dokumente/pdf/gelmon/GELMON_2017_book_of_abstracts.pdf)

Zoporowski, A., **Wagner, F. M.**, Kemna, A. (2017): Programmieren mit Python - Einbindung in Bachelor- und Mastermodule. 77. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Potsdam, 27.-30.03.2017, DOI:10.13140/RG.2.2.22326.70725.

Weigand, M., **Wagner, F. M.** (2017): Towards unified and reproducible processing of geoelectrical data. 4<sup>th</sup> International Workshop on Geoelectrical Monitoring, Nov. 22-24, Vienna, DOI:10.5281/zenodo.1067502.

Heinze, T., Limbrock, J., Weigand, M., **Wagner, F. M.**, Kemna, A. (2017): Self-potential monitoring of landslides on field and laboratory scale. AGU Fall Meeting, New Orleans, 11-15 Dec 2017, Landslide Geophysics: Advances in the Characterization and Monitoring of Unstable Slopes (NS43A-02). [Download PDF](https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/238872)

Mollaret, C., **Wagner, F. M.**, Hilbich, C., Hauck, C. (2017): Joint inversion of electric and seismic data applied to permafrost monitoring. 4<sup>th</sup> International Workshop on Geoelectrical Monitoring, Nov. 22-24, Vienna. [Download PDF](https://www.geologie.ac.at/fileadmin/user_upload/dokumente/pdf/gelmon/GELMON_2017_book_of_abstracts.pdf)

Kemna, A., Weigand, M., **Wagner, F. M.**, Hilbich, C., Hauck, C. (2017): Monitoring the Dynamics of Water Flow at a High-Mountain Permafrost Site Using Electrical Self-Potential Measurements. 77. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Potsdam, 27.-30.03.2017. [Download PDF](https://agu.confex.com/agu/fm16/meetingapp.cgi/Paper/190249)

Kemna, A., Weigand, M., Flores-Orozco, A., **Wagner, F. M.**, Hilbich, C., Hauck, C. (2017): Use of geoelectrical monitoring methods for characterizing thermal state, ice content and water flow in permafrost environments. 4<sup>th</sup> International Workshop on Geoelectrical Monitoring, Nov. 22-24, Vienna. [Download PDF](https://www.geologie.ac.at/fileadmin/user_upload/dokumente/pdf/gelmon/GELMON_2017_book_of_abstracts.pdf)

Günther, T., Rücker, C., **Wagner, F. M.** (2017): Advanced ERT inversion strategies with BERT & `pyGIMLi`. 4<sup>th</sup> International Workshop on Geoelectrical Monitoring, Nov. 22-24, Vienna. [Download PDF](https://www.geologie.ac.at/fileadmin/user_upload/dokumente/pdf/gelmon/GELMON_2017_book_of_abstracts.pdf)

## 2016

**Wagner, F. M.**, Wiese, B., Schmidt-Hattenberger, C., Maurer, H. (2016): Estimating permeability of a CO<sub>2</sub> storage reservoir based on multi-physical observations. 76. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Münster, 14.-17.03.2016. [Download PDF](http://www.smart-abstract.com/dgg2016_abstractband/abstracts/de/2225.html)

[class="icon-external-link" style="color:green" title="Download PDF"></i></a>](#)

**Wagner, F. M.**, Wiese, B., Schmidt-Hattenberger, C., Maurer, H. (2016): Insights on CO<sub>2</sub> Migration Based on a Multi-physical Inverse Reservoir Modeling Framework. 78<sup>th</sup> EAGE Conference & Exhibition, 30 May - 2 June 2016, Vienna, WS10-Quantitative Data Integration and Joint Inversion from Surface to Reservoir, DOI:10.3997/2214-4609.201601659 (invited).

Kemna, A., Weigand, M., **Wagner, F. M.**, Hilbich, C., Hauck, C. (2016): Monitoring the Dynamics of Water Flow at a High-Mountain Permafrost Site Using Electrical Self-Potential Measurements. AGU Fall Meeting, 12-16 December, 2016, San Francisco, USA. <https://agu.confex.com/agu/fm16/meetingapp.cgi/Paper/190249>[<i class="icon-external-link" style="color:green" title="Download PDF"></i></a>](#)

Rippe, D., Bergmann, P., Labitzke, T., **Wagner, F. M.**, Schmidt-Hattenberger, C. (2016): Surface-downhole and crosshole geoelectrics for monitoring of brine injection at the Ketzin CO<sub>2</sub> storage site. Geophysical Research Abstracts, Vol. 18, EGU2016-15388, EGU General Assembly 2016. <http://meetingorganizer.copernicus.org/EGU2016/EGU2016-15388.pdf>[<i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>](#)

Schmidt-Hattenberger, C., Bergmann, P., Labitzke, T., Rippe, D., **Wagner, F. M.** (2016): CO<sub>2</sub> Reservoir Monitoring Using a Permanent Electrode Array - The Ketzin Case Study. 78<sup>th</sup> EAGE Conference & Exhibition, 30 May - 2 June 2016, Vienna, DOI:10.3997/2214-4609.201600576.

Rücker, C., Günther, T., **Wagner, F. M.** (2016): Lösung gekoppelter Inversionsprobleme mit pyGIMLi. 76. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Münster, 14.-17.03.2016. [http://www.smart-abstract.com/dgg2016\\_abstractband/abstracts/de/2230.html](http://www.smart-abstract.com/dgg2016_abstractband/abstracts/de/2230.html)[<i class="icon-external-link" style="color:green" title="Download PDF"></i></a>](#)

Rücker, C., Günther, T., **Wagner, F. M.** (2016): pyGIMLi - An Open Source Python Library for Inversion and Modelling in Geophysics. 78<sup>th</sup> EAGE Conference & Exhibition, 30 May - 2 June 2016, Vienna, WS08-Open Source Software in Applied Geosciences, DOI:10.3997/2214-4609.201601651.

Bergmann, P., Schmidt-Hattenberger, C., Labitzke, T., **Wagner, F. M.**, Just, A., Flechsig, C., Rippe, D. (2016): Fluid injection monitoring using electrical resistivity tomography - Five years of CO<sub>2</sub> injection at Ketzin, Germany. 76. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Münster, 14.-17.03.2016. [http://www.smart-abstract.com/dgg2016\\_abstractband/abstracts/de/2259.html](http://www.smart-abstract.com/dgg2016_abstractband/abstracts/de/2259.html)[<i class="icon-external-link" style="color:green" title="Download PDF"></i></a>](#)

Bergmann, P., Schmidt-Hattenberger, C., Labitzke, T., **Wagner, F. M.**, Just, A., Flechsig, C., Rippe, D. (2016): Five Years of CO<sub>2</sub> Injection Monitoring at Ketzin, Germany, Using Electrical Resistivity Tomography. 78<sup>th</sup> EAGE Conference & Exhibition, 30 May - 2 June 2016, Vienna, DOI:10.3997/2214-4609.201601496.

## 2015

**Wagner, F. M.**, Bergmann, P., Labitzke, T., Wiese, B., Schmidt-Hattenberger, C., Rücker, C., Maurer, H. (2015): Effekte und Korrektur von Bohrloch bedingten Fehlern bei der permanenten geoelektrischen Überwachung von geologischen Speichern. 75. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Hannover 2015.

**Wagner, F. M.**, Wiese, B., Schmidt-Hattenberger, C., Maurer, H. (2015): Insights on CO<sub>2</sub> migration by means of a fully-coupled hydrogeophysical inversion. 3<sup>rd</sup> International Workshop on Geoelectrical Monitoring - GELMON (Vienna 2015). [http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112\\_043.pdf](http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112_043.pdf)[<i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>](#)

Schmidt-Hattenberger, C., Bergmann, P., **Wagner, F. M.** (2015): A Permanent Downhole Electrode Array as Valuable Tool for CO<sub>2</sub> Monitoring at the Ketzin Pilot Site. Third EAGE Workshop on Permanent Reservoir Monitoring 2015 (Stavanger, Norway 2015), DOI:10.3997/2214-4609.201411959.

Rippe, D., Bergmann, P., Labitzke, T., **Wagner, F. M.**, Schmidt-Hattenberger, C. (2015): A Permanent Downhole Electrode Array as Valuable Tool for CO<sub>2</sub> Monitoring at the Ketzin Pilot Site. 8<sup>th</sup> Trondheim Conference on CO<sub>2</sub> Capture, Transport and Storage, 16-18 June 2015 (Trondheim, Norway).

Rippe, D., Bergmann, P., Labitzke, T., **Wagner, F. M.**, Schmidt-Hattenberger, C. (2015): Surface-downhole geoelectrics for post-injection monitoring at the Ketzin pilot site. 3<sup>rd</sup> International Workshop on Geoelectrical Monitoring - GELMON (Vienna 2015). [http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112\\_044.pdf](http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112_044.pdf)[<i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>](#)

Schmidt-Hattenberger, C., Bergmann, P., Labitzke, T., Rippe, D., **Wagner, F. M.** (2015): Technical and methodological requirements for a permanent downhole geoelectrical measurement system as CO<sub>2</sub> monitoring tool - A review from the Ketzin pilot site. 3<sup>rd</sup> International Workshop on Geoelectrical Monitoring - GELMON (Vienna 2015). [http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112\\_041.pdf](http://opac.geologie.ac.at/wwwopacx/wwwopac.ashx?command=getcontent&server=images&value=BR0112_041.pdf)[<i class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>](#)

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Rücker, C., Günther, T., **Wagner, F. M.** (2015): Coupled hydrogeophysical modelling and ERT monitoring using **pyGIMLi**. 3<sup>rd</sup> International Workshop on Geoelectrical Monitoring - GELMON (Vienna 2015). <http://opac.geologie.ac.at/wwwopacx/wwwopacx>  
[class="icon-file-pdf-o" style="color:green" title="Download PDF"></i></a>](#)

Rücker, C., Günther, T., **Wagner, F. M.** (2015): **pyGIMLi** - Eine Open Source Python Bibliothek zur Inversion und Modellierung in der Geophysik. 75. Jahrestagung der Deutschen Geophysikalischen Gesellschaft (DGG), Hannover 2015.

## 2014

**Wagner, F. M.**, Bergmann, P., Labitzke, T., Schmidt-Hattenberger, C., Rücker, C., Maurer, H. (2014): Accounting for complex borehole completion in crosshole resistivity monitoring. 4<sup>th</sup> Helmholtz-Alberta Initiative (HAI) Science Forum, September 29, 2014, Edmonton, Canada.

**Wagner, F. M.**, Bergmann, P., Labitzke, T., Schmidt-Hattenberger, C., Günther, T., Maurer, H. (2014): High-Resolution Monitoring of CO<sub>2</sub> Injection with Permanent Electrodes: A 5-Year Retrospect from the Ketzin Site and Design Recommendations for Future Projects. AGU Fall Meeting, 15-19 December, 2014, San Francisco, USA. <http://adsabs.harvard.edu/abs/2014AGUFM.S3>  
[class="icon-external-link" style="color:green" title="Download PDF"></i></a>](#)

**Wagner, F. M.**, Bergmann, P., Labitzke, T., Deisman, N., Schmidt-Hattenberger, C., Maurer, H., Chalaturnyk, R. (2014): Paving the way to estimate CO<sub>2</sub> saturation from geoelectrical data. 4<sup>th</sup> Helmholtz-Alberta Initiative (HAI) Science Forum, September 29, 2014, Edmonton, Canada (acknowledged with the Best Oral Presentation Award).

## 2013

**Wagner, F. M.**, Günther, T., Schmidt-Hattenberger, C., Maurer, H. (2013): Estimating optimum electrode locations for high-resolution cross-hole resistivity monitoring. 2<sup>nd</sup> Internat. Workshop on Geoelectrical Monitoring, GELMON 2013, Vienna, 04.-06.12.2013, Berichte Geol. B.-A., 104, ISSN 1017-8880.

**Wagner, F. M.**, Günther, T., Schmidt-Hattenberger, C., Maurer, H. (2013): Optimized crosshole resistivity monitoring strategies for geological carbon dioxide storage reservoirs. 3<sup>rd</sup> Helmholtz-Alberta Initiative (HAI) Science Forum, September 2013, Edmonton, Canada (acknowledged with the Best Oral Presentation Award).

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