

CURRICULUM VITÆ DOCENTE: Prof. Michael Märker

A. Informazioni personali

2013	Abilitazione nazionale in Geografia fisica e geomorfologia (04/A3; Geo04)
2013	Abilitazione nazionale in Chimica Agraria, Genetica Agraria e Pedologia (07/E1)
2001	PhD (Dr.rer.nat) Facoltà di Chimica e Scienze della Terra della Università Friedrich-Schiller di Jena, Germania con la tesi: "Regional Erosion Modeling using the Erosion Response Units Concept (ERU) in two River Catchments in southern Africa."
1996	M.Sc. in Geografia Fisica con specializzazioni in Ecologia e conservazione ambientale, Friedrich-Wilhelms-Universität di Bonn, Germania.

B. Ambiti e filoni di ricerca

Relazioni suolo-paesaggio, processi di erosione e movimenti di massa, evoluzione del paesaggio, modellistica stocastica, idrologia del suolo, geoarcheologia, telerilevamento e GIS.

C. Pubblicazioni

Numero totale delle pubblicazioni:

> 100

44 pubblicazioni in giornali internazionali con impact factor

749 citazioni in WOS

17,02 citazioni medie per articolo

h-index: 12 (WOS)

Elenco delle pubblicazioni più recenti (ultimi 5 anni)/significative:

Angileri, S.A., Conoscenti, C., Hochschild, V., Märker, M., Rotigliano, E., Agnesi, V. (2016): Water erosion susceptibility mapping by applying stochastic gradient treeboost to the imera Meridionale River basin (Sicily, Italy), *Geomorphology* (2016), doi: [10.1016/j.geomorph.2016.03.018](https://doi.org/10.1016/j.geomorph.2016.03.018).

Märker M., Quénéhervé G., Bachofer F. & S. Mori (2015): A Simple DEM Assessment Procedure for Gully Systems Analysis in the Lake Manyara Area, Northern Tanzania". *Natural Hazards*. DOI: 10.1007/s11069-015-1855-y

Lombardo L., Cama M., Conoscenti C., Märker M., & Rotigliano E. (2015): Binary logistic regression versus stochastic gradient boosted decision trees in assessing landslide susceptibility for multiple-occurring landslide events: application to the 2009 storm event in Messina (Sicily, southern Italy). *Natural Hazards*. DOI: 10.1007/s11069-015-1915-3.

Bachofer F., Quénéhervé G., Hochschild V. & M. Märker (2015): Multisensoral Topsoil Mapping in the Semiarid Lake Manyara Region, Northern Tanzania. *Remote Sensing* 7(8), 9563-9586.

Kandel A.W., Bolus M., Bretzke K., Bruch A.A., Haidle M.N., Hertler, C. & Märker, M. (2015): Increasing Behavioral Flexibility? An Integrative Macro-Scale Approach to Understanding the Middle Stone Age of Southern Africa. *Journal of Archaeological Method and Theory*. DOI: 10.1007/s10816-015-9254-y.

Quénéhervé G., Bachofer F. & M. Märker (2015): Experimental Assessment of Runoff Generation Processes on Hillslope Scale in a Semiarid Region in Northern Tanzania. *Geografia Fisica e Dinamica Quaternaria*. 38 (1), 55-66.

Bachofer, F., Quénéhervé, G., Märker, M. & Hochschild V. (2015): Comparison of SVM and Boosted Regression Trees for the Delineation of Lacustrine Sediments using Multispectral ASTER Data and Topographic Indices in the Lake Manyara Basin. *Photogrammetrie, Fernerkundung und Geoinformation*. 1, 81-94.

Flores E., Quénéhervé G., Bachofer F., Shahzad F. & M. Märker (2015): Morpho-tectonic Interpretation of the Makuyuni Catchment in Northern Tanzania using DEM and SAR Data. *Geomorphology*, 248, 427-439. DOI [10.1016/j.geomorph.2015.07.049](https://doi.org/10.1016/j.geomorph.2015.07.049).

Zakerinejad, R. & Märker, M. (2015): An integrated assessment of soil erosion dynamics with special emphasis on gully erosion in the Mazayjan basin in the Southwest of Iran. *Natural Hazards*. DOI: 10.1007/s11069-015-1700-3

Vogel, S., Märker, M., Hölzmann, P., Rellini, I., Steinhübel, L., Robinson, M., Kastenmayer, P., Esposito, D., Imperatore, C. & Seiler, F. & (2015): From a stratigraphic sequence to a landscape evolution model: Late Pleistocene and Holocene volcanism, soil formation and land use in the shade of Mount Vesuvius (Italy). DOI: 10.1016/j.quaint.2015.02.033

Borrelli, P., Märker M. & B. Schütt (2015): Modelling Post-Tree-Harvesting soil erosion and sediment deposition potential in the Turano river basin (Italian central Apennine). *Land Degradation and Development*. 26 (4), pp. 356-366. DOI: 10.1002/ldr.2214

Conoscenti C., Agnesi V., Angileri S., Cappadonia C., Rotigliano E. & M. Märker (2014). A GIS-based approach

for gully erosion susceptibility modelling: A test in Sicily, Italy. *Environmental Earth Sciences*, 70 (3), pp. 1179-1195. DOI 10.1007/s12665-012-2205-y.

Lombardo, L., Cama, M., Märker M., Rotigliano E. (2014): A test of transferability for landslides susceptibility models under extreme climatic events: application to the Messina 2009 disaster. *Natural Hazards* 74 (3)1951-1989. DOI 10.1007/s11069-014-1285-2

Borrelli, P. Märker, M. Panagos, P. & B. Schütt (2014): Modeling soil erosion and river sediment yield for an intermountain drainage basin of the Central Apennines, Italy. *Catena* 114 (2014) 45–58

Bachofer F., Queneherve G. & Märker M. (2014): The delineation of paleo-shorelines in the Lake Manyara Basin using TerraSAR-X data. *Remote Sens.* ,6(3), 2195-2212. DOI:10.3390/rs6032195.

Zakerinejad, R. & Märker, M. (2014): Prediction of Gully Erosion Susceptibilities using detailed Terrain Analysis and Maximum Entropy Modeling: A case study in the Mazayejan Plain, Southwest Iran: *GEOGRAFIA FISICA E DINAMICA QUATERNARIA*, 37 (1), 67-76. DOI: 10.4461/GFDQ.2014.37.7

Soto-Bauerle, M.V., Märker, M., Rodolfi, G. & S.A. Sepúlveda (2014): Assessment of Morphodynamics triggered by Palaeolandscape features in the Tongoy Bay, Coquimbo Region, Central Chile. Accepted by *GEOGRAFIA FISICA E DINAMICA QUATERNARIA*, 37 (1), 51-66. DOI: 10.4461/GFDQ.2014.37.6

Vogel, S. & Märker, M. (2014): Analysis of Post-Burial Soil Developments of Pre-AD 79 Roman Paleosols near Pompeii (Italy). *Open Journal of Soil Science* DOI: 10.4236/ojss.2014.410035

Vogel, S. & Märker, M. (2013): Modeling the spatial distribution of AD 79 pumice fallout and pyroclastic density current and derived deposits of Somma-Vesuvius (Campania, Italy) integrating primary deposition and secondary redistribution. *Bulletin of Volcanology* 75: 778.

Vorpahl, P., Dislich, C., Elsenbeer, H., Märker, M. & B.Schröder (2013): Biotic controls on shallow translational landslides (2013) *Earth Surface Processes and Landforms*, 38 (2), pp. 198-212. DOI: 10.1002/esp.3320

Borrelli, P. Märker, M. & B. Schütt (2013): Modelling post-tree-harvesting soil erosion and sediment deposition potential in the Turano River Basin (Italian Central Apennine). *Land Degradation & Development*. DOI: 10.1002/ldr.2214

Märker, M., Dangel, F. Soto Bäuerle, V. & G. Rodolfi (2012): Assessment of natural hazards and Vulnerability in the Rio Copiapó catchment: A case study in the ungauged Quebrada Cinchado Catchment. *Investigaciones Geográficas Chile*, 44:17-28.

Märker, M., Pelacani, S. & B. Schröder (2011): A functional entity approach to predict soil erosion processes in a small Plio-Pleistocene Mediterranean catchment in Northern Chianti, Italy . *GEOMORPHOLOGY*, vol. 125 (4), pp. 530-540, ISSN:0169-555X

D. Esperienze didattiche

Corsi e lezioni di: pedologia, GIS, geomorfologia, modellistica di processi di erosione e movimenti di massa, modelli stocastici, idrologia del suolo e scorrimento superficiale, geoarcheologia
 2003-2008 Institute for Geoecology, University of Potsdam, Germany
 2005-2016 Institute for Soil Science and Plant Nutrition of the University of Florence, Italy
 2008-2016 Institute for Geography, University of Tübingen, Germany

E. Eventuali incarichi istituzionali all'interno degli organi di governo centrali e periferici dell'Ateneo

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F. Altre informazioni

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