

Curriculum Vitae

Stefan Kollet

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Research Interest

- Interactions of the terrestrial hydrologic and energy cycles
- Watershed hydrodynamics
- Scientific computing in HPC environments
- Surface water - groundwater interactions
- Subsurface flow and transport (mass, energy)
- Thermodynamics of soil moisture
- Experimental and theoretical aquifer hydraulics

Professional Experience

Sept. 2012 – present: Professor (W2) in Hydrology, Meteorological Institute, Bonn University, Germany

Research Topic Leader “Integrated Modeling of Terrestrial Systems”,
Agrosphere Institute (IBG-3), Research Centre Jülich, Germany

Sept. 2011 – Aug. 2012: Senior Computational Geoscientist, Basin Modeling & Inversion, Shell Global Solutions International BV, Rijswijk, The Netherlands

Jul. 2007 – Jul. 2011: Scientist, Meteorological Institute, Bonn University, Germany

Jun. 2005 – Jun. 2007: Physicist, Atmospheric, Earth, and Energy Sciences Department, Lawrence Livermore National Laboratory, USA

Jan. 2004 – Jun. 2005: Postdoctoral Researcher, Environmental Science Division, Lawrence Livermore National Laboratory, USA

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Education

- 1999 – 2003 Ph.D. (Geology – Hydrogeology), University of Nebraska – Lincoln, USA
Thesis Title: Stream-Aquifer Interactions under Pumping Conditions in an Unconfined Aquifer Considering Three-Dimensional Flow, Aquifer Heterogeneity, and Anisotropy
- 1995 – 1998 Diplom (M.Sc) Geology, Tübingen University, Germany
Thesis Title: Slug Tests in Highly-Permeable Aquifers
- 1992 – 1995 Vordiplom (B.Sc.) Geology, Stuttgart University, Germany

Projects

- 2011 – 2014: MiKlip - Decadal Predictions: Model Complexity Reduction Approach (BMBF, PI)
- 2011 – 2014: Influence of subsurface hydrodynamics on the lower atmosphere at the catchment scale (PI; SFB/TR32, DFG)
- 2011 – 2014: Large-eddy simulation of atmosphere and land interactions over heterogeneous surfaces (Co-PI; SFB/TR32, DFG)
- 2010 – 2013: Integrated water resources modeling and its uncertainty analysis under climate and land-use change (PI, part of the joint program “Land-Use and Water Resources Management under Rapidly Changing Environmental Conditions” of the DFG and the National Science Foundation China)
- 2009 – present Compute Time Grant, Jülich Supercomputing Centre, Fractal Scaling of Hydrodynamics at the Catchment Scale (PI)
- 2005 – 2006 Research Grant, Lawrence Livermore National Laboratory (Co-PI)
- 1999 – 2003 Research Grant, Central Platte Natural Resources District, Nebraska (PI)

Professional Services

- Since 2011: AGU Fall Meeting Program Committee Member, Hydrology
- 2011: Integrated Hydrologic Model Intercomparison Workshop, Co-Organizer
- 2011: MODEL CARE, Scientific Advisory Board Member
- 2011: MODFLOW & More, Scientific Advisory Committee Member
- Since Jan. 2010: Computers & Geosciences, Associate Editor
- Nov. 2009: Vadose Zone Journal, Guest Editor

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Jun. 2009:	Scientific Committee, International Workshop, SFB/TR32
Since 2009:	Reviewer for NOW and DFG
Since 2007:	Session convener at international conferences
Since 2005:	Groundwater Technical Committee, AGU
Since 2003:	Reviewer for international scientific journals

Lectures

- Land surface processes (half semester course)
- Introduction into Hydrology (full semester course)
- Groundwater Modeling (full semester course)
- Introduction into Geostatistics (two day short-course)

Professional Memberships

- American Geophysical Union (AGU)
- European Geophysical Union (EGU)

Awards and Scholarships

- Oliver Endowed lecturer in Hydrology 2010/11, Jackson School of Geosciences, Austin Texas
- Outstanding Student Paper Award, Hydrology Section, American Geophysical Union, 2001 Fall Meeting
- Student Travel Grant, Geological Society of America North-Central Section, Annual Meeting Boston, 2001
- HSP3 Graduate Scholarship, German Academic Exchange Service, 8/1999-7/2000

Selected Invited Talks

Feb. 2003, Texas Austin University; Mar. 2005, University of New Mexico; Apr. 2006, Kansas Geological Survey; May 2006, University of Texas A&M; AquaTerra, 2009, Tübingen University; NovCare 2009, Umweltforschungszentrum Leipzig; Nov. 2009 Basel University; Nov. 2010 UT Austin