



# Computational Methods in Water Resources

XVII International Conference

July 6-10, 2008

Westin San Francisco Market Street Hotel

## Oral Session Guidelines

Please use the checklist below to ensure that you have not missed any important steps in preparing for your presentation at the CMWR 2008 meeting.

1. Prepare Your Presentation.
2. Determine Your Audio/Visual Needs.
3. Create a Backup Copy of Your Presentation.
4. Submit Your Presentation.
5. Give Your Presentation.

### (1) Prepare Your Presentation

- Acceptable formats for Presentations:
  - MS Windows: Microsoft PowerPoint, Acrobat PDF.
  - Macintosh: Microsoft PowerPoint, Acrobat PDF

### (2) Determine Your Audio/Visual Needs

All oral session meeting rooms are equipped with the following audio/visual equipment:

- 1-LCD projector (1024 x 768 native screen resolution)
- 2-Computers (1 Windows-based PC and 1 Mac)
- 1-Screen
- 1-Laser pointer
- 1-Wireless Presentation clicker
- 1-Speaker timer

The computers in the oral session rooms are provided to accommodate both Windows-based PC users as well as Macintosh users. The PC will be configured with Microsoft Windows XP Professional and Microsoft Office 2003. The Macintosh computer will be configured with Mac OS X 10.3, Microsoft Office 2004. Machines will also be configured with Adobe Acrobat Reader.

All videos should be in AVI, MPEG, or MOV format so they will run properly on the computers provided.

If you would like to submit your presentation prior to the conference, please contact [CMWR2008@lbl.gov](mailto:CMWR2008@lbl.gov)

### **(3) Create a Backup Copy of Your Presentation**

We recommend you bring at least two copies of your presentation to the meeting in case there is a problem with one. The following media formats will be supported:

- CD-R and CD-RW;
- Memory Stick card

### **(4) Submit Your Presentation**

- Review your presentation prior to the day of your talk. When reviewing your presentation, make sure all fonts appear as expected and all audio/video clips are working properly. You may not have an opportunity to edit your presentation the day of your talk. When you are finished reviewing your presentation and verify it is ready, Projection personnel will load your presentation
- Each oral presenter must check-in with the Projection coordinator either during the conference check-in on Sunday, April 6<sup>th</sup> from 4:00 p.m. – 8:00 p.m.; or at your specific conference room between 7:00 a.m. – 7:45 a.m. the day of your talk.
  - Advise the Projection coordinator which platform you prefer (Mac or PC)
  - Advise if you have any “special” features (i.e. movies, internet, etc.). If so, you should provide ample time to ensure your talk performs as expected!
- The Projection coordinator will load your presentation on the appropriate platform from the A/V station located in each conference room on the morning of your talk (or at the conference check-in desk on April 6<sup>th</sup> between 4:00 – 8:00 p.m. only).
- Personal laptops cannot be used in meeting rooms while giving your oral presentation. Your presentation must be loaded onto one of the conference room laptops by the Projection coordinator.
- When the presentation is to be given, the speaker will control the program using a wireless mouse (Note: Speakers will not see the laptop screen during their talk). At the end of the meeting, all files will be destroyed
- Projection coordinators are not responsible for your devices, i.e., memory cards, disks, laptops, etc.

### **(5) Give Your Presentation**

- Be considerate of other speakers and the audience by staying within your allotted time. The time allotted for your presentation includes time for discussion and changeover to the next

speaker. Session chairs will hold you to the allotted time. This is essential to ensure adequate time for questions and discussion as well as adherence to schedule.

- Please discuss the material as reported in the abstract
- Prepare your presentation in advance so that your ideas are logically organized and your points clear.
- Take time to rehearse your presentation. If your presentation runs longer than the allotted time, eliminate the least essential material and rehearse again.



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## CMWR LIST OF ORAL PRESENTERS

Presenter	Email Address	Title	Date	Abstract Ref #
Adler, Pierre M.	<a href="mailto:padler@ccr.jussieu.fr">padler@ccr.jussieu.fr</a>	Deposition in multiphase flow through porous media on the pore scale	7/7/08 - PM	<a href="#">Pore Scale 1.1</a>
Adler, Pierre M.	<a href="mailto:padler@ccr.jussieu.fr">padler@ccr.jussieu.fr</a>	Dispersion and reaction in porous and fractured media	7/9/08 PM	<a href="#">Subsurface 2.12</a>
Ahmad, Zulfequar	<a href="mailto:zulfice@iitr.ernet.in">zulfice@iitr.ernet.in</a>	FINITE VOLUME MODEL FOR BOD-DO INTERACTION IN STREAMS	7/7/08 - PM	<a href="#">Hydrogeophysics 2.7</a>
Akanji, Lateef	<a href="mailto:l.akanji06@imperial.ac.uk">l.akanji06@imperial.ac.uk</a>	Pore Scale Simulation of Multiphase Flow through Fractures in Porous Media	7/8/08 AM	<a href="#">Pore Scale 2.6</a>
Algive, Lionnel	<a href="mailto:lionnel.algive@ifp.fr">lionnel.algive@ifp.fr</a>	Reactive Percolation using Pore-Network Modeling	7/8/08 PM	<a href="#">Pore Scale 3.6</a>
Altaf, Muhammed Umer	<a href="mailto:m.u.altaf@ewi.tudelft.nl">m.u.altaf@ewi.tudelft.nl</a>	Reactive transport analysis of microbiological zoning in groundwater	7/10/08 AM	<a href="#">Ensemble 1.2</a>
Amir, Laila	<a href="mailto:Laila.Amir@inria.fr">Laila.Amir@inria.fr</a>	Preconditioning Newton-Krylov methods for reactive transport	7/9/08 PM	<a href="#">High-resolution 2.6</a>
Andre, L.	<a href="mailto:l.andre@brgm.fr">l.andre@brgm.fr</a>	Long-term injection of supercritical CO <sub>2</sub> : Physical and chemical impact on the near-well zone	7/10/08 AM	<a href="#">CO<sub>2</sub> Seq 1.3</a>
Atetjevich, Eli	<a href="mailto:eli@water.ca.gov">eli@water.ca.gov</a>	A Parallel and Adaptive Algorithm for Computation of Shallow Water Flows	7/9/08 AM	<a href="#">New Approaches 1.3</a>
Attinger, Sabine	<a href="mailto:sabine.atinger@ufz.de">sabine.atinger@ufz.de</a>	Stability criteria for heterogeneous density driven flows	7/10/08 AM	<a href="#">Mass and Heat 1.4</a>
Attinger, Sabine	<a href="mailto:sabine.atinger@ufz.de">sabine.atinger@ufz.de</a>	A mass conservative numerical scheme for reactive solute transport in soil	7/9/08 AM	<a href="#">High-resolution 1.4</a>
Bandilla, Karl W.	<a href="mailto:bandilla@eng.buffalo.edu">bandilla@eng.buffalo.edu</a>	Computational efficiency of contaminant transport modeling using	7/9/08 PM	<a href="#">High-resolution 2.11</a>
Batra, Namrata	<a href="mailto:nbatra2@uiuc.edu">nbatra2@uiuc.edu</a>	Impact of Changing Climate on Water Resources	7/7/08 - PM	<a href="#">Climate Change.2.7</a>
Bau, Domenico	<a href="mailto:domenico.bau@colostate.edu">domenico.bau@colostate.edu</a>	Stochastic Multiobjective Management of Groundwater Supply Systems	7/8/08 PM	<a href="#">Optimization 1.1</a>
Becker, Bernhard	<a href="mailto:b.becker@iww.rwth-aachen.de">b.becker@iww.rwth-aachen.de</a>	On the modeling of lignite open pit mine drainage and pit lake filling in a regional groundwater model	7/8/08 AM	<a href="#">Simulation 1.6</a>
Beran, Bora	<a href="mailto:borabe@microsoft.com">borabe@microsoft.com</a>	Virtual Globes as Tools of Hydrologic Data Discovery and Visualization	7/8/08 PM	<a href="#">Ecoinformatics 1.3</a>
Berli, Markus	<a href="mailto:markus.berli@dri.edu">markus.berli@dri.edu</a>	Modeling rhizosphere soil mechanics and hydraulics - an overview	7/8/08 PM	<a href="#">Root-Soil 1.3</a>
Bethke, Craig M.	<a href="mailto:bethke@uiuc.edu">bethke@uiuc.edu</a>	Reactive transport analysis of microbiological zoning in groundwater flows	7/9/08 AM	<a href="#">Subsurface 1.1</a>
Bijeljic, Branko	<a href="mailto:b.bijeljic@imperial.ac.uk">b.bijeljic@imperial.ac.uk</a>	Impact of Pore-scale Spatial Heterogeneity on Macroscopic Solute Dispersion	7/10/08 AM	<a href="#">Multiphase 2.7</a>
Binning, Philip	<a href="mailto:pjb@er.dtu.dk">pjb@er.dtu.dk</a>	Risk Analysis for Leakage in Geological CO <sub>2</sub> Storage Considering Large Database Reservoir Statistics	7/10/08 PM	<a href="#">CO<sub>2</sub> Seq 2.2</a>



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Presenter	Email Address	Title	Date	Abstract Ref #
Birkholzer, Jens	JTBirkholzer@lbl.gov	Continuous Time Random Walk Analysis of Solute Transport in Fractured Porous Media	7/10/08 PM	Fate.Transport 1.4
Blessent, Daniela	daniela.blessent.1@ulaval.ca	A new approach for hydrogeological modeling in discretely-fractured media: from 3D geological representation to numerical simulations	7/9/08 PM	<a href="#">Genera.1.2</a>
Botros, Farag	fefarag@hotmail.com	Modeling Flow and Nitrate Transport in a Deep Alluvial Vadose Zone:	7/7/08 - AM	Numerical 1.2
Brekke, Levi	lbrekke@do.usbr.gov	Assessing the Influence of Reservoir Operations Model Uncertainty for Comparative Studies Application	7/7/08 - PM	<a href="#">Climate Change.2.3</a>
Brush, Charles F.	cbrush@water.ca.gov	Simulating historical changes in the hydrologic system of California's Central Valley with the California Central Valley Groundwater-Surface Water Simulation Model (C2VSIM)	7/9/08 PM	<a href="#">General.1.6</a>
Buscheck, Thomas A.	buscheck1@llnl.gov	Multiscale Thermohydrologic Model Supporting the Total System Performance Assessment for the Proposed Repository at Yucca Mountain	7/10/08 PM	<a href="#">Modeling 1.2</a>
Camporese, Matteo	camporese@idra.unipd.it	Data assimilation techniques for a coupled model of surface and subsurface flow	7/10/08 AM	<a href="#">Ensemble 1.3</a>
Camporese, Matteo	camporese@idra.unipd.it	Electrical Resistivity Tomography monitoring of a tracer test experiment and local hydraulic properties assessment from data	7/7/08 - PM	<a href="#">Hydrogeophysics 2.1</a>
Cardiff, Michael	mcardiff@stanford.edu	Joint inversion for hydrogeophysical facies zonation through level set methods	7/7/08 - AM	<a href="#">Hydrogeophysics 1.6</a>
Cardiff, Michael	mcardiff@stanford.edu	Multi-physics models as a platform for integrated environmental modeling and inverse modeling	7/9/08 AM	<a href="#">New Approaches 1.7</a>
Carle, Steven F.	carle1@llnl.gov	Simulation of <sup>14</sup> C Dispersal by CO <sub>2</sub> Gas Bubble Expansion from Nuclear Test Detonation in Unsaturated Carbonate Rock	7/10/08 PM	Fate.Transport 1.1
Carle, Steven F.	carle1@llnl.gov	Simulation of <sup>3</sup> H- <sup>3</sup> He Groundwater Age by Coupling Gas and Liquid Phase Transport Processes from the Surface to the Saturated Zone	7/7/08 - PM	Numerical 2.5
Chambon, Julie	jcc@env.dtu.dk	A multicomponent transport and enhanced anaerobic dechlorination model of a single fracture – clay matrix system	7/9/08 PM	<a href="#">Subsurface 2.5</a>
Chau, Jessica Furrer	chau@engr.uconn.edu	Simulating Isolated Bacterial Microhabitats in Unsaturated Soil	7/7/08 - AM	<a href="#">Black Box.1.7</a>
Chen, Jinsong	jchen@lbl.gov	Development of a Sampling-based Bayesian Model for Watershed-Scale Characterization	7/7/08 - AM	<a href="#">Hydrogeophysics 1.5</a>



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Cirpka, Olaf A.	<a href="mailto:olaf.cirpka@eawag.ch">olaf.cirpka@eawag.ch</a>	Temporal Moments in Geophysical Monitoring of Salt-Tracer Experiments	7/7/08 - PM	<a href="#">Hydrogeophysics 2.2</a>
Clauss, Frithjof	<a href="mailto:clauss@geotechnik.tu-darmstadt.de">clauss@geotechnik.tu-darmstadt.de</a>	Coupled Numerical Simulation of Shallow Geothermal Energy Systems	7/10/08 AM	<a href="#">Mass and Heat 1.3</a>
Clemo, Tom	<a href="mailto:tomc@cgiss.boisestate.edu">tomc@cgiss.boisestate.edu</a>	Field-Scale Control Volume/Test Cell to Advance Parameter Estimation	7/7/08 - AM	<a href="#">Hydrogeophysics 1.2</a>
Collins, William	<a href="mailto:WDCollins@lbl.gov">WDCollins@lbl.gov</a>	Abrupt Climate Change	7/7/08 - AM	<a href="#">Climate Change 2.9</a>
Cortis, Andrea	<a href="mailto:acortis@lbl.gov">acortis@lbl.gov</a>	Peclet-dependent memory kernels for transport in heterogeneous media	7/8/08 PM	<a href="#">Optimization 1.1</a>
Cowan, Mark	<a href="mailto:Mark.A.Cowan@erdc.usace.army.mil">Mark.A.Cowan@erdc.usace.army.mil</a>	Steady-state analysis of Effect of Proposed Dredge Material Containment Facility upon Freshwater Aquifers	7/9/08 PM	<a href="#">General.1.7</a>
Craig, James R.	<a href="mailto:jrcraig@uwaterloo.ca">jrcraig@uwaterloo.ca</a>	Three-dimensional series solutions for regional multi-layer flow in sloping aquifers	7/8/08 AM	<a href="#">Simulation 1.3</a>
Cueto-Felgueroso, Luis	<a href="mailto:lcueto@mit.edu">lcueto@mit.edu</a>	Nonequilibrium models of two-phase flow in multidimensions: simulation of gravity fingering and viscous fingering	7/9/08 PM	<a href="#">Multiphase 1.8</a>
Dafny, Elad	<a href="mailto:elad.dafny@mail.huji.ac.il">elad.dafny@mail.huji.ac.il</a>	NUMERICAL MODEL FOR THE YARQON-TANNINIM GROUNDWATER BASIN, ISRAEL: CHALLENGES AND ADVANCES	7/8/08 AM	<a href="#">Simulation 1.4</a>
Dai, Zhenxue	<a href="mailto:daiz@lanl.gov">daiz@lanl.gov</a>	Modeling Flow and Reactive Solute Transport in Multi-scale Fractured Rock	7/10/08 AM	<a href="#">Multiphase 2.9</a>
Dale, Andrew	<a href="mailto:dale@geo.uu.nl">dale@geo.uu.nl</a>	Quantifying microbial activity in subsurface environments using stable isotopes as biogeochemical tracers	7/9/08 AM	<a href="#">Subsurface 1.2</a>
Demirkanli, Inci	<a href="mailto:ddemirk@clemson.edu">ddemirk@clemson.edu</a>	Soil-Root Interactions Controlling Plutonium Transport in Variably Saturated Soils	7/8/08 PM	<a href="#">Root-Soil 1.5</a>
Dentz, Marco	<a href="mailto:marco.dentz@gmail.com">marco.dentz@gmail.com</a>	Effective Transport Modelling in Random Fracture Networks Using Coupled Continuous Time Random Walks	7/10/08 AM	<a href="#">Multiphase 2.2</a>
Dettinger, Michael	<a href="mailto:mddettin@usgs.gov">mddettin@usgs.gov</a>	Translating climate-change uncertainties into impact risks--Are there '\best\' choices of scenarios for detailed assessments?	7/7/08 - PM	<a href="#">Climate Change</a>
Deutschbauer, Adam	<a href="mailto:AMDeutschbauer@lbl.gov">AMDeutschbauer@lbl.gov</a>	High-Throughput Genetic Characterization of Environmental Bacteria	7/7/08 - AM	<a href="#">Black Box.1.4</a>
Di Chiaral, Raphaël	<a href="mailto:dichiaral@imfs.u-strasbg.fr">dichiaral@imfs.u-strasbg.fr</a>	A global pressure approach for modelling compressible multiphase flow in heterogenous porous media	7/10/08 PM	<a href="#">Multiphase 3.6</a>
Di, Yuan	<a href="mailto:diyuan@mech.pku.edu.cn">diyuan@mech.pku.edu.cn</a>	A Modeling Study of steady flow through a straight channel with porous walls	7/7/08 - PM	<a href="#">Numerical 2.6</a>



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Doetsch, Joseph	joseph@aug.ig.erdw.ethz.ch	Three-dimensional hydrogeophysical zonation of a gravel aquifer in the vicinity of the Thur River, Switzerland	7/7/08 - AM	<a href="#">Hydrogeophysics 1.3</a>
Doster, Florian	<a href="mailto:doster@icp.uni-stuttgart.de">doster@icp.uni-stuttgart.de</a>	Numerical studies of multiphase flow in porous media	7/10/08 PM	<a href="#">Multiphase 3.5</a>
Dwivedi, Ravindra	Ravindra@nmt.edu	Effect of slope on subsurface free-convection processes.	7/9/08 PM	<a href="#">General.1.9</a>
Ebigbo, Anozie	anozie.ebigbo@lws.uni-stuttgart.de	Darcy scale modelling of biomass accumulation in the subsurface	7/9/08 PM	<a href="#">Subsurface 2.4</a>
el Farouk, Boukhris Omar	Omar.Boukhris@bwk.kuleuven.be	Climate change impact on hydrological extremes in Belgium	7/7/08 - PM	<a href="#">Climate Change.2.5</a>
Englert, Andreas	ALEnglert@lbl.gov	Estimation of a three dimensional hydraulic conductivity field at the	7/7/08 - AM	<a href="#">Hydrogeophysics 1.4</a>
Faybishenko, Boris	bafaybishenko@lbl.gov	Fuzzy Systems Modeling for Uncertainty Prediction in Water Resources	7/9/08 AM	Intelligent 1.3
Fekete, Balazs M.	balazs.fekete@unh.edu	Separating 'Guts' and 'Garbage' in Earth System Models	7/9/08 AM	<a href="#">New Approaches 1.5</a>
Ferronato, Massimiliano	ferronat@dmsa.unipd.it	NOVEL BLOCK PRECONDITIONERS FOR THE ITERATIVE SOLUTION TO 3D LARGE FE MODELS OF COUPLED FLOW-DEFORMATION IN POROUS MEDIA	7/9/08 PM	<a href="#">High-resolution 2.7</a>
Ferronato, Massimiliano	ferronat@dmsa.unipd.it	A PILOT TEST OF CO2 SEQUESTRATION IN A DEPLETED GAS FIELD IN THE PO PLAIN, ITALY: FLUID-DYNAMICAL AND GEO-MECHANICAL ISSUES	7/10/08 AM	<a href="#">CO2 Seq 1.2</a>
Flint, Alan L.	aflint@usgs.gov	Evaluating model predictions and characterization methods applied to the deep vadose zone at San Geronio Pass, California: Lessons learned after 5 years of artificial recharge	7/7/08 - AM	Numerical 1.6
Flint, Alan L.	aflint@usgs.gov	Regional evaluation of changes in potential evapotranspiration under a changing climate and influences on recharge and runoff	7/7/08 - AM	<a href="#">Climate Change.1.3</a>
Frippiat, Christophe	cfrippia@mines.edu	Experimental and Numerical Studies to Evaluate the Dependence of Accuracy of Subsurface Model Calibration on Quality and Quantity of Observations	7/7/08 - PM	<a href="#">Hydrogeophysics 2.3</a>
Frolov, Sergey	frolovs@stccmop.org	Expediting ensemble simulation using very fast statistical surrogates for high dimensional physics-based models	7/10/08 AM	<a href="#">Ensemble 1.6</a>
Gasda, Sarah E.	sgasda@unc.edu	Temporally and spatially adaptive time integration methods for Richards' equation	7/9/08 PM	<a href="#">High-resolution 2.9</a>



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Genty, Alain	<a href="mailto:alain.genty@cea.fr">alain.genty@cea.fr</a>	Transport modeling of pesticides in soil porosity using Lattice Boltzmann simulations and 3D maps provided from X-ray computed tomography	7/7/08 - PM	<a href="#">Pore Scale 1.2</a>
GENTY, Alain	<a href="mailto:alain.genty@cea.fr">alain.genty@cea.fr</a>	Flow and radionuclide transport calculation around nuclear waste disposal	7/10/08 PM	<a href="#">Fate.Transport 1.6</a>
Gherardi, Fabrizio	<a href="mailto:f.gherardi@igg.cnr.it">f.gherardi@igg.cnr.it</a>	Gas-water-rock interactions at Mt. Amiata geothermal field as natural analogues for enhanced geothermal systems (EGS) operated with CO2	7/10/08 AM	<a href="#">Mass and Heat 1.6</a>
Ghezzehei, Teamrat A.	<a href="mailto:taghezzehei@lbl.gov">taghezzehei@lbl.gov</a>	Transport of emulsions in porous media	7/10/08 PM	<a href="#">Multiphase 2.10</a>
Gilbert, Benjamin	<a href="mailto:Bgilbert@lbl.gov">Bgilbert@lbl.gov</a>	Micro-scale flow and transport studies in various porous geological media by lattice Boltzmann methods	7/7/08 - PM	<a href="#">Pore Scale 1.6</a>
Golden, Heather	<a href="mailto:Golden.Heather@epa.gov">Golden.Heather@epa.gov</a>	Simulating Runoff from a Grid Based	7/9/08 PM	<a href="#">General 1.11</a>
Grace, Matthew D.	<a href="mailto:mgrace@sandia.gov">mgrace@sandia.gov</a>	<a href="#">Development of an Iterative Site</a>	7/10/08 AM	<a href="#">Ensemble 1.7</a>
Gray, Genetha	<a href="mailto:gagray@sandia.gov">gagray@sandia.gov</a>	The Applicability of Hybrid-Optimization Techniques for Solving the Plume Containment Problem	7/8/08 AM	<a href="#">Optimization 1.1</a>
Hajibeygi, Hadi	<a href="mailto:hajibeygi@ifd.mavt.ethz.ch">hajibeygi@ifd.mavt.ethz.ch</a>	Iterative Multiscale Finite-Volume Method	7/10/08 PM	<a href="#">Multiphase 3.4</a>
Halecky, Nicholas	<a href="mailto:nehalecky@lbl.gov">nehalecky@lbl.gov</a>	NATURAL CONVECTION IN EMPLACEMENT DRIFTS AT YUCCA MOUNTAIN AND IMPACT ON DRIFT SEEPAGE	7/10/08 PM	<a href="#">Modeling 1.4</a>
Hammond, Glenn E.	<a href="mailto:glenn.hammond@pnl.gov">glenn.hammond@pnl.gov</a>	Massively Parallel Ultrascale Subsurface Simulation	7/9/08 AM	<a href="#">High-resolution 1.6</a>
Hanson, Randall	<a href="mailto:rthanson@usgs.gov">rthanson@usgs.gov</a>	SIMULATION OF CONJUNCTIVE USE IN REGIONAL AQUIFER	7/8/08 AM	<a href="#">Simulation 1.1</a>
Hao, Yue	<a href="mailto:hao1@lnl.gov">hao1@lnl.gov</a>	Validating the Multiscale Thermohydrologic Model Using an Alternative Model of the Proposed Repository at Yucca Mountain	7/10/08 PM	<a href="#">Modeling 1.3</a>
Harp, Dylan R.	<a href="mailto:dharp@lanl.gov">dharp@lanl.gov</a>	Aquifer structure identification and uncertainty evaluation using evolutionary stochastic inversion	7/7/08 - AM	<a href="#">Hydrogeophysics 1.7</a>
Harter, Thomas	<a href="mailto:ThHarter@ucdavis.edu">ThHarter@ucdavis.edu</a>	Upscaling Nonpoint Source Pollution with Nitrate: A Regional Modeling Approach	7/8/08 AM	<a href="#">Simulation 1.5</a>
Hassan, Ahmed E	<a href="mailto:ahmed.hassan@dri.edu">ahmed.hassan@dri.edu</a>	Three-dimensional Transport Modeling using the Finite Cell Approach	7/8/08 AM	<a href="#">Pore Scale 2.7</a>
Hassan, Ahmed E.	<a href="mailto:ahmed.hassan@dri.edu">ahmed.hassan@dri.edu</a>	Identifying Dominant Transport Mechanisms Using Neural Networks	7/8/08 PM	<a href="#">Optimization 1.1</a>
Hauge, Vera Louise	<a href="mailto:vera.louise.hauge@sintef.no">vera.louise.hauge@sintef.no</a>	Non-uniform grid coarsening applied on explicit fracture modeling	7/10/08 PM	<a href="#">Multiphase 3.7</a>



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Hayek, Mohamed	mohamed.hayek@lsce.ipsl.fr	Theoretical analysis of CO <sub>2</sub> plume vertical migration in a stratified heterogeneous porous media	7/10/08 AM	<a href="#">CO<sub>2</sub> Seq 1.6</a>
Hesse, F.	falk.hesse@ufz.de	On the Upscaling of the reaction-advection-diffusion equation in porous media with monod-like kinetics.	7/8/08 PM	<a href="#">Pore Scale 3.5</a>
Hidalgo, Hugo G.	hhidalgo@ucsd.edu	Downscaling of climate change projections at high spatial resolution using the method of constructed analogues	7/7/08 - AM	<a href="#">Climate Change.1.5</a>
Hill, Mary C.	mchill@usgs.gov	Using a weather analogy to understand how to communicate ground-water model uncertainty	7/9/08 AM	Intelligent 1.8
Hines, Amanda	Amanda.M.Hines@usace.army.mil	A Scientific Data Repository Based on Ontology Design	7/8/08 PM	<a href="#">Ecoinformatics 1.4</a>
Hojberg, Anker Lajer	alh@geus.dk	Structured uncertainty assessment in groundwater modeling	7/9/08 AM	Intelligent 1.1
Hopmans, Jan W.	<a href="mailto:jwhopmans@ucdavis.edu">jwhopmans@ucdavis.edu</a>	Climate Change Impacts on Crop Water Requirements, Soil and Ground Water Salinity in California's San Joaquin Valley	7/7/08 - AM	Numerical 1.1
Hou, Dingchen	dingchen.hou@noaa.gov	Predictability experiments with a river flow ensemble forecast system	7/10/08 AM	<a href="#">Ensemble 1.5</a>
Hu, Bill X.	hu@gly.fsu.edu	Using Ensemble Kalman Filter to Simulate Groundwater Flow and Solute Transport in Heterogeneous Media with Unknown Contamination Sources	7/8/08 PM	<a href="#">Optimization 1.1</a>
Huang, Hai	<a href="mailto:Hai.Huang@inl.gov">Hai.Huang@inl.gov</a>	Computer simulations of multiphase fluid motion in unsaturated fracture apertures and porous media: A volume of fluid (VOF) approach	7/10/08 AM	<a href="#">Multiphase 2.5</a>
Hunt, James R.	hunt@ce.berkeley.edu	Synthesis of hydrologic data reveals rainfall-runoff relationships and examines watershed-scale changes	7/8/08 PM	<a href="#">Ecoinformatics 1.1</a>
Hunter, Jr., Robert M.	Robert.M.Hunter@usace.army.mil	Parallel Coupled Watershed-Nearshore Model Development	7/9/08 AM	<a href="#">New Approaches 1.2</a>
Husak, Greg	husak@geog.ucsb.edu	Investigation of the IMpacts of Climate Change on Crop Productivity and Drought Events	7/7/08 - AM	<a href="#">Climate Change.1.1</a>
Jaffré, Jérôme	jerome.jaffre@inria.fr	Numerical simulation of the far field for a French deep underground repository of long life radionuclides	7/10/08 PM	Fate.Transport 1.7
Jansik, Danielle P.	jansikd@onid.orst.edu	Imaging Biofilm Architecture in Porous Media	7/7/08 PM	<a href="#">Pore Scale Poster.3</a>
Javaux, M.	m.javaux@fz-juelich.de	Modeling root water uptake based on the distribution of water potential in soil and root	7/8/08 PM	Root-Soil 1.1
Jha, Raman K.	raman@mail.utexas.edu	Effect of Diffusion on Dispersion and Mixing	7/8/08 AM	<a href="#">Pore Scale 2.3</a>



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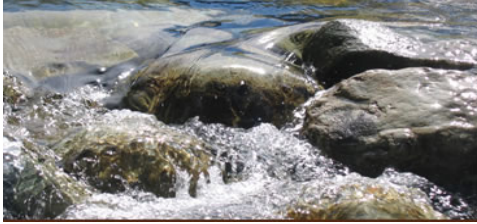
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Presenter	Email Address	Title	Date	Abstract Ref #
Juanes, Ruben	<a href="mailto:juanes@mit.edu">juanes@mit.edu</a>	A variational multiscale high-resolution method for the simulation of unstable multiphase flow in	7/9/08 AM	<a href="#">High-resolution 1.5</a>
Juanes, Ruben	<a href="mailto:juanes@mit.edu">juanes@mit.edu</a>	TIME-ACCURATE, HIGH-ORDER SCHEMES FOR THE NUMERICAL SIMULATION OF NONEQUILIBRIUM MODELS OF MULTIPHASE FLOW IN POROUS MEDIA	7/9/08 AM	<a href="#">High-resolution 1.2</a>
Juanes, Ruben	<a href="mailto:juanes@mit.edu">juanes@mit.edu</a>	Mathematical and numerical models to predict migration distance of the CO2 plume in a geologic basin	7/10/08 AM	<a href="#">CO2 Seq 1.5</a>
Kamai, Tamir	<a href="mailto:tkamai@ucdavis.edu">tkamai@ucdavis.edu</a>	Modeling alternative heat pulse probe designs for improved estimations of thermal and hydrological properties	7/9/08 PM	<a href="#">General.1.10</a>
Keating, Elizabeth	<a href="mailto:ekeating@lanl.gov">ekeating@lanl.gov</a>	The applicability of calibration-constrained predictive uncertainty analysis techniques to strongly non-linear models with high parameter dimensionality	7/9/08 AM	<a href="#">Intelligent 1.6</a>
Kees, C. E.	<a href="mailto:christopher.e.kees@erdc.usace.army.mil">christopher.e.kees@erdc.usace.army.mil</a>	Locally conservative, stabilized finite element methods for multiphase flow	7/9/08 PM	<a href="#">High-resolution 2.8</a>
Ketilsson, Jonas	<a href="mailto:jonas.ketilsson@os.is">jonas.ketilsson@os.is</a>	Production Capacity Assessment: Case-Study Svartsengi	7/10/08 AM	<a href="#">Mass and Heat 1.2</a>
Koch, Manfred	<a href="mailto:riverine_eng@yahoo.com">riverine_eng@yahoo.com</a>	Simulation of enhanced dynamic interaction between surface and groundwater in a conjunctive-use area with a semi-coupled model	7/8/08 AM	<a href="#">Surface Water 1.6</a>
Koch, Manfred	<a href="mailto:kochm@uni-kassel.de">kochm@uni-kassel.de</a>	Cost-economical Optimization and Feasibility Investigation of Groundwater Management Schemes for Groundwater Flow	7/8/08 AM	<a href="#">Optimization 1.1</a>
Koch, Manfred	<a href="mailto:kochm@uni-kassel.de">kochm@uni-kassel.de</a>	On the recognition of 20th century climate change in Germany by means of stochastic time-series analysis of regional hydroclimatic	7/7/08 - PM	<a href="#">Climate Change.2.6</a>
Kourakos, George	<a href="mailto:giorqk@gmail.com">giorqk@gmail.com</a>	Pumping Optimization of Coastal Aquifers based on Evolutionary Annealing-Simplex	7/8/08 AM	<a href="#">Optimization 1.1</a>
Kovscek, Anthony	<a href="mailto:kovscek@stanford.edu">kovscek@stanford.edu</a>	Carbon and Water Management in the Context of ECBM	7/10/08 PM	<a href="#">CO2 Seq 2.6</a>
Kozdon, Jeremy	<a href="mailto:jkozdon@stanford.edu">jkozdon@stanford.edu</a>	Robust Multi-D Transport Schemes with Reduced Grid Orientation Effects	7/9/08 PM	<a href="#">High-resolution 2-11</a>
Kräutle, Serge	<a href="mailto:kraeutle@am.uni-erlangen.de">kraeutle@am.uni-erlangen.de</a>	Efficient numerical techniques for multi-component reactive transport problems with the global implicit approach	7/9/08 PM	<a href="#">High-resolution 2.3</a>
Kuhlmann, Anna	<a href="mailto:anna.kuhlmann@iws.uni-stuttgart.de">anna.kuhlmann@iws.uni-stuttgart.de</a>	Effect of heterogeneous soil and root structure on the dynamic behavior of the water budget in the vadose zone	7/8/08 PM	<a href="#">Root-Soil 1.2</a>



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Kumar, Mukesh	muk139@psu.edu	Finite Volume Model For Coupled Simulation Of 1D-river Flow, 2D-overland Flow and 3D-variably Saturated Flow	7/7/08 - AM	Numerical 1.7
Kumar, Navin	NavinK@ucr.edu	A COUPLED MODELING APPROACH FOR INCORPORATING VARIABLY SATURATED WATER FLOW AND SOLUTE TRANSPORT IN GROUND WATER MODELS	7/7/08 PM	Numerical 2.8
Kumar, Sujay	Sujay.v.Kumar@nasa.gov	Hydrological modeling and data assimilation system with the Land Information System	7/9/08 AM	New Approaches 1.1
Kuttanikkad, Sreejith Pulloor	sreejith@hal.iwr.uni-heidelberg.de	Pore-scale Simulation of Dispersion Using Discontinuous Galerkin Finite Element Method and Random-Walk Particle Tracking	7/7/08 - PM	Pore Scale 1.7
LaForce, Tara C.	<a href="mailto:t.laforce@imperial.ac.uk">t.laforce@imperial.ac.uk</a>	Design of Carbon Dioxide Storage in Oilfields and Aquifers	7/10/08 PM	CO2 Seq 2.4
Lagneau, Vincent	vincent.lagneau@ensmp.fr	Improved accuracy and efficiency for the simulation of strong feedback of chemistry on hydrodynamics based on operator splitting	7/10/08 PM	Modeling 1.1
Leonardson, Rebecca	rebeccal@ce.berkeley.edu	Hydrograph shape and riverbed fine sediments on the Russian River	7/8/08 PM	Ecoinformatics 1.4
Leterrier, Nikos	<a href="mailto:nikos.leterrier@cea.fr">nikos.leterrier@cea.fr</a>	Hydraulic Retroaction of Porosity change in Reactive Transport	7/10/08 PM	Modeling 1.7
Li, Li	lili@lbl.gov	Solid Phase Transformation And Biomass Accumulation During Uranium Bioremediation At Rifle, Colorado	7/9/08 PM	Subsurface 2.7
Linde, Niklas	linde@aug.ig.erdw.ethz.ch	Modeling and inversion of self-potential signals associated with flooding events at the Thur River, Switzerland	7/7/08 - PM	Hydrogeophysics 2.6
Lo, Min-Hui	mlo@uci.edu	Calibration of the NCAR Community Land Model (CLM) using GRACE and Baseflow	7/8/08 AM	Surface Water 1.2
Luce, Curtis	cluce@cs.nmsu.edu	Modeling the Interactions among Microbial Communities under Environmental Conditions through High Density Phylogenetic Microarrays.	7/7/08 - AM	Black Box.1.5
Lunati, Ivan	ivan.lunati@epfl.ch	An iterative multiscale finite-volume method converging to the fine-scale solution	7/10/08 PM	Multiphase 3.9
Maggi, F.	fmaggi@berkeley.edu	Nitrogen Cycle Modeling: Mechanistic Estimate of N-losses From Agricultural Fields on Seasonal Time Periods	7/8/08 PM	Root-Soil 1.4



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Mahadevan, Radhakrishnan	<a href="mailto:krishna.mahadevan@utoronto.ca">krishna.mahadevan@utoronto.ca</a>	An integrated model of G. sulfurreducens for investigating bioremediation of U(VI) in subsurface sediments	7/7/08 - AM	<a href="#">Black Box.1.2</a>
Malmström, Maria E.	<a href="mailto:malmstro@kth.se">malmstro@kth.se</a>	Field Scale Dispersion of Reactive Substances in Groundwater: Spreading versus Mixing Effects	7/9/08 AM	<a href="#">Subsurface 1.3</a>
Maryška, Jiří	<a href="mailto:jiri.maryska@tul.cz">jiri.maryska@tul.cz</a>	New Approach to Reduction of the Dimension of the Reactive Transport Problem	7/9/08 PM	<a href="#">Subsurface 2.11</a>
Massoudieh, Arash	<a href="mailto:amassoudieh@ucdavis.edu">amassoudieh@ucdavis.edu</a>	Kinetics of conjugative gene transfer on surfaces in granular porous media.	7/7/08 - AM	<a href="#">Black Box.1.6</a>
Massoudieh, Arash	<a href="mailto:amassoudieh@ucdavis.edu">amassoudieh@ucdavis.edu</a>	A Coupled Biogeochemical Reactive Transport Model for a Riverine Water-Column Benthic sediments	7/9/08 AM	<a href="#">Subsurface 1.4</a>
Matringe, Sebastien	<a href="mailto:matringe@gmail.com">matringe@gmail.com</a>	A new mixed finite element method on hexahedra, its equivalent sparse finite volume formulation, and convergence of multipoint flux approximations in 3D	7/9/08 AM	<a href="#">High-Resolution</a>
Maxwell, Reed M.	<a href="mailto:maxwell5@llnl.gov">maxwell5@llnl.gov</a>	Understanding the interplay of increased pressure, residual heat and geologic and geochemical environment on radionuclide migration from underground nuclear tests	7/10/08 PM	<a href="#">Fate.Transport 1.2</a>
McCarthy, John L.	<a href="mailto:jlmccarthy@lbl.gov">jlmccarthy@lbl.gov</a>	Extended Metadata Registries (XMDR) for Water Resource Modeling	7/8/08 PM	<a href="#">Ecoinformatics 1.7</a>
Meakin, Paul	<a href="mailto:Paul.Meakin@inl.gov">Paul.Meakin@inl.gov</a> <a href="mailto:paul.meakin@fys.uio.no">paul.meakin@fys.uio.no</a>	Pore scale simulation of multiphase fluid flow and reactive transport using particle methods and continuum fluid dynamics.	7/8/08 AM	<a href="#">Pore Scale 2.1</a>
Meile, Christof	<a href="mailto:cmeile@uga.edu">cmeile@uga.edu</a>	Microbial metabolism in reactive transport models of porous media: Approaches, Potential and Limitations	7/7/08 - AM	<a href="#">Black Box.1.1</a>
Miller, Gretchen R.	<a href="mailto:gmillier@berkeley.edu">gmiller@berkeley.edu</a>	Representing the biosphere in a reactive transport model of wastewater reuse	7/9/08 AM	<a href="#">Subsurface 1.5</a>
Miller, Norman	<a href="mailto:NLMiller@lbl.gov">NLMiller@lbl.gov</a>	Toward Understanding the Role of Ground Water in Hydroclimate Using a Single Column Atmosphere Model	7/7/08 - PM	<a href="#">Numerical 2.7</a>
Minsker, Barbara	<a href="mailto:minsker@uiuc.edu">minsker@uiuc.edu</a>	Optimizing Model Calibration and Water Resource Management Strategies Under Uncertainty: New Approaches and Findings	7/9/08 AM	<a href="#">Intelligent 1.4</a>
Mirzaei, Mahsanam	<a href="mailto:mahsanam.mirzaei@eng.ox.ac.uk">mahsanam.mirzaei@eng.ox.ac.uk</a>	Determination of Dynamic Coefficient in Porous Media: Experimental approach	7/9/08 PM	<a href="#">Multiphase 1.4</a>



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Mogollón, José M.	mogollon@geo.uu.nl	Development and application of a three-phase model coupling methane gas and microbial dynamics	7/9/08 PM	<a href="#">Subsurface 2.2</a>
Mohnke, O.	o.mohnke@geophysik.rwth-aachen.de	Numerical simulation of SIP and NMR responses of coupled pore systems using 3D FEM modelling.	7/7/08 - PM	<a href="#">Hydrogeophysics 2.5</a>
Molins, S.	smolins@lbl.gov	Implementation of reaction-induced multicomponent gas transport into a vadose zone reactive transport model	7/9/08 PM	<a href="#">Subsurface 2.1</a>
Monnier, Jerome	Jerome.Monnier@imag.fr	Data Assimilation and Superposed Models for Floodplain Flows	7/8/08 PM	<a href="#">Optimization 1.1</a>
Morales-Casique, Eric	emcasique@yahoo.com	Multimodel analysis of pneumatic pressure test data from unsaturated fractured tuff	7/9/08 AM	Intelligent 1.7
Motealleh, Siyavash	smotealleh@mail.utexas.edu	Grain-scale Modeling of Capillarity-controlled Displacements in Fractionally Wetted Porous Media	7/8/08 AM	<a href="#">Pore Scale 2.4</a>
Mukherjee, Partha P.	partham@lanl.gov	Pore-Scale Modeling of Transport in Charged Porous Media	7/7/08 - PM	<a href="#">Pore Scale 1.4</a>
Mukhopadhyay, Sumit	SMukhopadhyay@lbl.gov	Flowing Fluid Temperature Logging in Boreholes: A Novel Approach for Estimating The Transport Properties of Fractured Porous Media	7/7/08 - PM	<a href="#">Hydrogeophysics 2.4</a>
Murdoch, Larry	lmurdoc@clemson.edu	THE NEED FOR A COMMUNITY HYDROLOGIC MODELING PLATFORM	7/9/08 AM	<a href="#">New Approaches 1.8</a>
Nakshatrala, Kalyana Babu	nakshatr@uiuc.edu	A multiscale finite element framework for simulating reactive contaminant transport in heterogeneous porous media	7/10/08 AM	<a href="#">Multiphase 2.6</a>
Nelson, Kirk E.	knelson@ucdavis.edu	New Pore-Scale Analysis for Colloid Filtration Theory	7/8/08 PM	<a href="#">Pore Scale 3.7</a>
Neruda, Roman	roman@cs.cas.cz	Computational Intelligence Runoff Modeling by Means of Multi-agent Systems	7/9/08 AM	<a href="#">New Approaches 1.4</a>
Neuman, Shlomo P.	neuman@hwr.arizona.edu	On Model Selection Criteria in Multimodel Analysis	7/10/08 AM	<a href="#">Ensemble 1.1</a>
Neuweiler, Insa	insa.neuweiler@iws.uni-stuttgart.de	Homogenization of two-phase flow processes in porous media with different structures	7/9/08 PM	<a href="#">Multiphase 1.1-2</a>
Nogués, Juan P.	jnagues@princeton.edu	Two Dimensional Upscaling of Pressure and Mass Transfer Terms in a Two Phase Flow System	7/9/08 PM	<a href="#">Multiphase 1.6</a>
Nordbotten, Jan Martin	jan.nordbotten@math.uib.no	Efficient calculation of large scale response to CO2 injection	7/10/08 PM	<a href="#">CO2 Seq 2.1</a>
Normani, Stefano D.	<a href="mailto:sdnorman@civmail.uwaterloo.ca">sdnorman@civmail.uwaterloo.ca</a>	Assessing the Hydrologic Impacts of Climate Change at the Watershed Scale	7/7/08 - AM	<a href="#">Climate Change 1.2</a>
Nützmann, Gunnar	nuetzmann@igb-berlin.de	Modeling Groundwater – Surface Water Exchange on different scales: the Lowland River Spree example (Germany)	7/8/08 AM	<a href="#">Surface Water 1.5</a>



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Oldenburg, Curtis M.	cmoldenburg@lbl.gov	On Modeling Near-Surface Migration of CO <sub>2</sub> from a Shallow-Release Test: Results from the Vadose and Saturated Zones	7/10/08 PM	<a href="#">CO<sub>2</sub> Seq 2.5</a>
Oswald, Sascha E.	sascha.oswald@ufz.de	Numerical analysis of pulsed gas injections in respect to oxygen mass transfer and biogeochemical consumption	7/9/08 AM	<a href="#">Subsurface 1.6</a>
Otte, Wolf-Dieter	dieter.otte@nau.edu	Structural organization of metadata catalogues in water research and management	7/8/08 PM	<a href="#">Ecoinformatics 1.6</a>
Otte, Wolf-Dieter	dieter.otte@nau.edu	Designing and implementing a framework for metadata translations using Dijkstra's shortest path algorithm	7/8/08 PM	<a href="#">Ecoinformatics 1.8</a>
Pan, Lehua	lpan@lbl.gov	Modeling Hydraulic Responses to Meteorological Forcing: From Canopy to Aquifer	7/7/08 - AM	Numerical 1.3
Panday, Sorab	spanday@geomatrix.com	Water Supply Systems in Groundwater/Surface-water Models	7/8/08 AM	<a href="#">Surface Water 1.4</a>
Payatakes, A.C.	<a href="mailto:acp@admin.forth.gr">acp@admin.forth.gr</a>	HIERARCHICAL SIMULATION OF BIOFILM GROWTH DYNAMICS IN 3-D POROUS MEDIA: CONSTANT FLOW RATE VERSUS CONSTANT HEAD	7/10/08 AM	<a href="#">Multiphase 2.1</a>
Peckham, Scott D.	Scott.Peckham@colorado.edu	Evaluation of Model Coupling Frameworks for Use by the Community Surface Dynamics Modeling System (CSDMS)	7/9/08 AM	<a href="#">New Approaches 1.6</a>
Pinder, George	<a href="mailto:pinder@uvm.edu">pinder@uvm.edu</a>	Simulation of Subsurface Biological Systems using Cellular Automata	7/9/08 PM	<a href="#">Subsurface 2.10</a>
Porter, Mark L.	portrma@engr.orst.edu	LATTICE-BOLTZMANN SIMULATIONS OF THE P <sub>c</sub> - S - a <sub>nw</sub> RELATIONSHIP	7/9/08 PM	<a href="#">Multiphase 1.5</a>
Prodanovic, Masa	masha@ices.utexas.edu	A level set method for non-zero contact angle drainage and imbibition in realistic porous media	7/10/08 PM	<a href="#">Multiphase 3.3</a>
Prodanovic, Masa	masha@ices.utexas.edu	Two-scale pore network modeling	7/9/08 PM	<a href="#">Multiphase 1.7</a>
Pruess, Karsten	K_Pruess@lbl.gov	On Leakage of CO <sub>2</sub> from an Open Wellbore: Predictions from the Drift Flux Model	7/10/08 AM	<a href="#">CO<sub>2</sub> Seq 1.1</a>
Pruess, Karsten	K_Pruess@lbl.gov	On the Development of Enhanced Geothermal Systems (EGS) with CO <sub>2</sub> as Heat Transmission Fluid	7/10/08 AM	<a href="#">Mass and Heat 1.5</a>
Pruess, Karsten	K_Pruess@lbl.gov	Numerical Studies on Enhanced CO <sub>2</sub> Dissolution and Mineral Trapping due to Formation of Aqueous Complexes	7/10/08 PM	<a href="#">CO<sub>2</sub> Seq 2.7</a>
Raeesi, Behrooz	braeesi@uwyo.edu	Three-dimensional mixed-wet random pore-scale network modeling	7/8/08 AM	<a href="#">Pore Scale 2.2</a>
Renard, Philippe	philippe.renard@unine.ch	Stochastic hydrogeology: what professionals really need?	7/9/08 AM	Intelligent 1.2
Riaz, Amir	ariaz@stanford.edu	Experimental and Numerical Investigations of CO <sub>2</sub> Injection into Saline Formation	7/10/08 PM	<a href="#">CO<sub>2</sub> Seq 2.3</a>



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Riaz, Amir	<a href="mailto:ariaz@stanford.edu">ariaz@stanford.edu</a>	Analysis of Mixed Explicit-Implicit Method	7/9/08 PM	<a href="#">High-resolution 2.10</a>
Ricciardi, Karen	<a href="mailto:Karen.Ricciardi@umb.edu">Karen.Ricciardi@umb.edu</a>	The effects of uncertainty on a coastal aquifer management problem	7/8/08 AM	<a href="#">Optimization 1.1</a>
Rihani, Jehan F.	<a href="mailto:rjehan@berkeley.edu">rjehan@berkeley.edu</a>	Towards a Complete Model of the Hydrologic Cycle: Idealized	7/8/08 AM	<a href="#">Surface Water 1.3</a>
Rodriguez, Matt	<a href="mailto:mattr@sdsc.edu">mattr@sdsc.edu</a>	Integrating GIS Web applications with OLAP and RDBMS	7/8/08 PM	<a href="#">Ecoinformatics 1.2</a>
Samper, Javier	<a href="mailto:jsamper@udc.es">jsamper@udc.es</a>	Evaluation of climate change impacts on water resources of Ebre River Basin with GIS-BALAN	7/7/08 - PM	<a href="#">Climate Change.2.4</a>
Santillana, Mauricio	<a href="mailto:mauricio@ices.utexas.edu">mauricio@ices.utexas.edu</a>	Analytical and Numerical Properties of the Diffusive Wave Approximation of the Shallow Water Equations with Applications to Water Flow in Wetlands.	7/9/08 PM	<a href="#">General.1.5</a>
Scheibe, Timothy D.	<a href="mailto:tim.scheibe@pnl.gov">tim.scheibe@pnl.gov</a>	Pore-scale modeling of reactive and non-reactive transport: Upscaling and multiscale hybrid modeling	7/8/08 PM	<a href="#">Pore Scale 3.1</a>
Schröder, T.	<a href="mailto:to.schroeder@fz-juelich.de">to.schroeder@fz-juelich.de</a>	Computational improvements for coupled 3D soil-root flow models	7/8/08 PM	<a href="#">Root-Soil 1.7</a>
Schwarz, Alex O.	<a href="mailto:alexschwarz@udec.cl">alexschwarz@udec.cl</a>	Development of the Sulfidic Diffusion Active Permeable Reactive Barrier (DAPRB) Technology	7/9/08 PM	<a href="#">Subsurface 2.6</a>
Seneviratne, Sanjaya	<a href="mailto:sanjaya@water.ca.gov">sanjaya@water.ca.gov</a>	Developing Artificial Neural Networks to Represent Salinity Intrusion from Sea Level Rise	7/7/08 - PM	<a href="#">Climate Change.2.1</a>
Shahrak, Arsalan Zolfaghari	<a href="mailto:azolfagh@uwyo.edu">azolfagh@uwyo.edu</a>	Effects of thermodynamically consistent threshold capillary pressures on residual nonwetting phase saturation and relative permeability	7/8/08 PM	<a href="#">Pore Scale 3.4</a>
Shih, Dong-Sin	<a href="mailto:dsshih@nchc.org.tw">dsshih@nchc.org.tw</a>	NUMERICAL MODELING OF A MOUNTAINOUS WATERSHED IN LANYANG CREEK BASIN, TAIWAN USING WASH123D	7/7/08 - PM	<a href="#">Numerical 2.2</a>
Simunek, Jiri	<a href="mailto:Jiri.Simunek@ucr.edu">Jiri.Simunek@ucr.edu</a>	Compensated Root Water and Nutrient Uptake	7/8/08 PM	<a href="#">Root-Soil 1.6</a>
Smith, Duane H.	<a href="mailto:Duane.Smith@netl.doe.gov">Duane.Smith@netl.doe.gov</a>	Fracture Roughness Effects on Flow Through a Fracture	7/9/08 PM	<a href="#">High-resolution 2.1</a>
Stadler, Leopold	<a href="mailto:Leopold.Stadler@wahyd.tu-berlin.de">Leopold.Stadler@wahyd.tu-berlin.de</a>	A Double Continuum Approach for Two-Phase Flow in Porous Media	7/9/08 - PM	<a href="#">Multiphase 3.10</a>
Stauffer, Philip H.	<a href="mailto:stauffer@lanl.gov">stauffer@lanl.gov</a>	Modeling evaporation from a non-vegetated lysimeter experiment	7/7/08 - PM	<a href="#">Numerical 2.3</a>
Sun, Yunwei	<a href="mailto:sun4@llnl.gov">sun4@llnl.gov</a>	Modeling Radionuclide Transport with First-order Chain Reactions	7/10/08 PM	<a href="#">Fate.Transport 1.3</a>
Sun, Yunwei	<a href="mailto:sun4@llnl.gov">sun4@llnl.gov</a>	Validating Thermohydrologic Models Using the Drift Scale Test of the Proposed Repository at Yucca Mountain: Impact of Capillary-Pressure Cap	7/10/08 PM	<a href="#">Modeling 1.5</a>



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Svyatskiy, Daniil	dasvyat@lanl.gov	A Multilevel Multiscale Mimetic Method for Two-Phase Flows in Porous Media	7/10/08 PM	<u>Multiphase 3.8</u>
Sykes, Jonathan F.	sykesj@uwaterloo.ca	Regional and Site-Scale Modelling in Support of a Proposed Deep Geologic Repository in Canada for Low and Intermediate Level Radioactive Waste	7/10/08 PM	Fate.Transport 1.5
Teatini, Pietro	<a href="mailto:teatini@dmsa.unipd.it">teatini@dmsa.unipd.it</a>	ON THE UNIFORMITY OF UPLIFT INDUCED BY INJECTING SEAWATER INTO DEEP HYDRAULICALLY HETEROGENEOUS AQUIFERS	7/9/08 PM	<u>General.1.8</u>
Thullner, Martin	martin.thullner@ufz.de	Incorporating substrate bioavailability in reactive transport models for biodegradation processes	7/9/08 PM	<u>Subsurface 2.3</u>
Tortora, Paul R.	ptortora@andrew.cmu.edu	The effect of viscosity ratio on immiscible viscous fingering in model porous networks	7/8/08 PM	<u>Pore Scale 3.3</u>
Tracy, Fred T.	Fred.T.Tracy@usace.army.mil	An Accuracy Evaluation of the Parallel Adaptive Hydrology (ADH) Program for Unsaturated Flow Using Analytical Solutions	7/9/08 PM	<u>High-resolution 2.5</u>
Tyagi, Manav	tyagi@ifd.mavt.ethz.ch	A Stochastic-Lagrangian Model for Multiphase Flow in Porous Media: Upscaling of Non-Equilibrium Pore Scale Dynamics	7/10/08 AM	<u>CO2 Seq 1.4</u>
Uccelli, Alessandro	<a href="mailto:aleucc@berkeley.edu">aleucc@berkeley.edu</a>	Flow within a Steep Forested Hillslope in Northern California	7/8/08 AM	<u>Surface Water 1.1</u>
Unsal, Evren	e.unsal@imperial.ac.uk	A Fracture-Only Reservoir Simulator with Physically-Based Transfer Functions	7/10/08 AM	<u>Multiphase 2.4</u>
van Esch, J. M.	john.vanesch@deltares.nl	Adaptive multiscale finite element method for subsurface flow simulation.	7/9/08 AM	<u>High-resolution 1.7</u>
van Noorden, Tycho	t.l.v.noorden@tue.nl	Crystal dissolution and precipitation in porous media: variable pore geometry and upscaled model	7/7/08 - PM	<u>Pore Scale 1.5</u>
Vasco, D. W.	dwvasco@lbl.gov	Estimating permeability from quasi-static deformation	7/7/08 - AM	<u>Hydrogeophysics 1.1</u>
Vasin, Milos	Milos.Vasin@iws.uni-stuttgart.de	Influence of soil structure on estimation of effective parameters in the unsaturated zone	7/10/08 AM	<u>Multiphase 2.3</u>
Vesselinov, Velimir	vvv@lanl.gov	Inverse analysis of temporal high-frequency pressure and water-supply pumping data to identify aquifer properties	7/8/08 AM	<u>Optimization 1.1</u>
Vrugt, Jasper A.	vrugt@lanl.gov	Adaptive Markov Chain Monte Carlo Sampling and High Performance Computing for Estimating Parameters in High-Resolution Three-Dimensional Flow and Transport Models	7/8/08 PM	<u>Optimization 1.1</u>



# Computational Methods in Water Resources

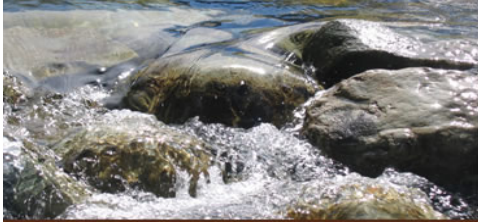
XVII International Conference

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Westin San Francisco Market Street Hotel

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Wang, Cheng	chengw@mail.ucf.edu	An Integrated Hydrology/Hydraulic and Water Quality Model for Watershed-scale Simulations	7/7/08 - PM	Numerical 2.1
Weill, Sylvain	sylvain.weill@cea.fr	Continuum Darcy approach for surface-subsurface flow and transport modelling : application to the Thies plot experiment in Senegal	7/7/08 - PM	Numerical 2.1
Weill, Sylvain	sylvain.weill@ete.inrs.ca	Incorporating transport processes into a coupled model of surface and subsurface interactions	7/7/08 - AM	Numerical 1.4
Wildemeersch, Samuel	<a href="mailto:swildemeersch@ulg.ac.be">swildemeersch@ulg.ac.be</a>	The Hybrid Finite-Element Mixing-Cell method: a new flexible method	7/8/08 AM	Simulation 1.7
Winton, Corey	corey.winton@gmail.com	POD Calibration for ADH	7/8/08 PM	<u>Optimization 1.1</u>
Wong, Sanders	s38wong@uwaterloo.ca	A series solution for multi-layer aquifers with natural geometry	7/8/08 AM	Simulation 1.2
Wood, Brian D.	brian.wood@oregonstate.edu	Some comments on upscaling.	7/8/08 PM	<u>Pore Scale 3.2</u>
Wu, Kejian	kejian.wu@pet.hw.ac.uk	INTEGRATION OF MULTI-SCALE NETWORKS OF HETEROGENEOUS POROUS MEDIA AND THEIR MULTI-PHASE FLOW PREDICTION	7/8/08 AM	<u>Pore Scale 2.5</u>
Yabusaki, Steven	yabusaki@pnl.gov	A path forward for biogeochemical reactive transport modeling of in situ uranium bioremediation	7/7/08 - AM	<u>Black Box.1.3</u>
Yanhui, Dong	<a href="mailto:dong.yanhui@yahoo.com">dong.yanhui@yahoo.com</a>	a parallel-computing method for	7/8/08 AM	Simulation 1.8
Ye, Ming	mingye@scs.fsu.edu	Comparison of Laplace Approximation and Monte Carlo Methods for Bayesian Model Selection and Multimodel Averaging	7/9/08 AM	Intelligent 1.5
Yeh, William W-G	williamy@seas.ucla.edu	Review of Optimization Methods for Parameter Estimation and Experimental Design in Groundwater Modeling	7/8/08 AM	<u>Optimization 1.1</u>
Young, Chuck	<a href="mailto:cyoung@sei-us.org">cyoung@sei-us.org</a>	A climate driven water resources model	7/7/08 - AM	<u>Climate Change.1.7</u>
Young, Chuck	cyoung@sei-us.org	Modeling the Hydrology of California's Sierra Nevada for Sub-Watershed Scale Adaptation to Climate Change	7/7/08 - AM	<u>Climate Change.1.6</u>
Zanello, Francesca	zanello@dmsa.unipd.it	Modeling the hysteretic behaviour of the moisture retention curves of peat soils in the Zennare Basin, Italy	7/9/08 PM	<u>General.1.4</u>
Zhang, Guoxiang	gxzhang@lbl.gov	Geochemical Reactive Transport Modeling of Boiling/Evaporative Dryout in Porous/Fractured Rock	7/9/08 PM	<u>General.1.3</u>
Zhang, Yingqi	yqzhang@lbl.gov	Impact of groundwater pumping on near-river hydrology	7/7/08 - AM	Numerical 1.5
Zhou, Hui	huizhou@stanford.edu	An Adaptive Multiscale Finite Volume Formulation for Two-phase Flow and Transport in Porous Media	7/10/08 PM	<u>Multiphase 3.1-2</u>



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Zyvoloski, George	gaz@lanl.gov	PREDICTING THE PERFORMANCE OF GEOTHERMAL RESERVOIRS: SOME USEFUL NUMERICAL TECHNIQUES	7/10/08 AM	<u>Mass and Heat 1.7</u>