

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

IS	Plenary Lecture		
IS	On the Mathematical and Numerical Analysis of a Model for the River Channel Formation	<a href="#">Jesús Ildefonso Díaz</a>	Page 359
IS	Stochastic groundwater simulations for highly heterogeneous porous media	<a href="#">Jocelyne Erhel</a>	Page 419
IS	Novel Class of Preconditioners for the Iterative Solutions of Geomechanical Fe Equations	<a href="#">Giuseppe Gambolati</a>	Web
IS	Recent Progress in Tsunami Hazard Assessment: Modeling and Case Studies	<a href="#">Stéphan T. Grilli</a>	Web
IS	Two-phase multi-component flow with interfaces of phase disappearing: Method of Extended Saturations	<a href="#">Michel Panfilov</a>	Page 737
IS	High order finite volume numerical schemes for nonconservative hyperbolic systems. Applications to geophysical flow model	<a href="#">Carlos Parés</a>	Web
IS	Some applications of multivariate spline quasi-interpolants	<a href="#">Paul Sablonnière</a>	Web
IS	Reservoir Simulation in the Oil Industry	<a href="#">Pierre Samier</a>	Web
MS	<b>MiniSymposia</b>		
MS01	<b>Numerical Simulation of Enhanced Oil Recovery</b>	<a href="#">Organizer: Arjan Kamp (CHLOE, Pau, France)</a>	
MS01-1	Two-phase Compositional Flow in Porous Media: Analytical Front Tracker Method and Regularized Asymptotic HT-Splitting for the Riemann Problem	<a href="#">Anahita Abadpour</a> , Mikhail Panfilov	Page 1
MS01-2	Analytical and numerical modeling of electrical heating method for oil recovery	<a href="#">I.I. Bogdanov and A.M. Kamp</a>	Page 263
MS01-3	Maximal oil recovery by simultaneous condensation of alkane and steam	<a href="#">J. Bruining</a> and D. Marchesin	Page 299
MS01-4	Is using streamlines for thermal recovery processes really such a crazy idea?	<a href="#">Margot G. Gerritsen, Zhouyuan Zhu</a> and Marco R. Thiele	Page 487
MS01-5	A two-phase compositional model for kinetic cell experiment simulations	<a href="#">A. Lapene</a> , G. Debenest, M. Quintard, A.M. Kamp, B. Corre and L.M. Castanier	Page 579
MS01-6	Two-phase flow through fractured porous media	<a href="#">V. Mourzenko</a> , I. Bogdanov, J.-F. Thovert and P.M. Adler	Page 695
MS02	<b>Numerical Modeling of CO2 Geological Storage</b>	<a href="#">Organizer: Anthony Michel (IFP, Rueil-Malmaison, France)</a>	
MS02-1	Approximation of Multiphase Flows in Porous Media by Central Schemes	<a href="#">E. Abreu, F. Furtado, M. Mendes, F. Pereira</a> and S. Ribeiro	Page 25
MS02-2	Integration of near-wellbore physics into a full-field flow simulation model	<a href="#">J. Brac, D. Ding, G. Renard</a>	Page 287
MS02-3	CO2 disposal into carbonate-dominated reservoirs : where and when decarbonatation does occur ?	<a href="#">Garcia, D.</a> , Moutte, J., Michel, A. and Trenty, L.	Page 473
MS02-4	Large Scale Simulation of CO2 Geological Storage	<a href="#">A. Michel</a> , J-M.Gratien, F.Haeberlein, L.Trenty and P.Have	Page 655
MS02-5	Geochemical modelling in CO2-rich fluids: how to model mineral reactivity in water-poor systems?	<a href="#">Olivier Regnault</a> and Vincent Lagneau	Page 787
MS02-6	CO2 Geological Storage: Flow modelling issues from injector well head to reservoir - an industrial perspective	<a href="#">Sylvain Thibaut</a> and Caroline Goulay	Page 859
MS02-7	The impact of heterogeneity on the distribution of CO <sub>2</sub> : Numerical simulation of CO <sub>2</sub> storage at Ketzin	<a href="#">Ursula Lengler, Marco De Lucia</a> and Michael Kühn	Page 597
MS03	<b>Gas Migration through Engineered and Geological Barriers for a Deep Repository for Radioactive Waste: Modeling &amp; Numerical Simulations</b>	<a href="#">Organizer: Brahim Amaziane (UPPA &amp; MoMaS, Pau, France)</a>	
MS03-1	Convergence of a finite volume scheme and numerical simulations for water-gas flow in porous media	<a href="#">M. Afif</a> and B. Amaziane	Page 55
MS03-2	Modeling and Numerical Simulations of Water-Gas Flow in Porous Media using the Concept of Global Pressure	<a href="#">B. Amaziane, M. Jurak</a> and A. Zgaljic Keko	Page 115
MS03-3	A Finite Volume Scheme for Two Phase Flow in Porous Media. Application to Nuclear Waste Storage	<a href="#">O. Angelini, C. Chavant</a> , S. Granet and R. Eymard	Page 133
MS03-4	Migration of H <sub>2</sub> out of ILW disposal drift: different methods using Tough2 for modeling two-phase flow in fractured zone (EDZ)	<a href="#">A. Burnol</a> , F. Claret and C. Tournassat	Page 305

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

MS03-5	Numerical Simulation of Two Phase Flow in Porous Media in a Context of High Performance Computing	<b>Florian Caro</b> , Alain Genty, Eli Laucoin and Bilal Saad	Page 323
MS03-6	Nonlinear reactive waves in hydrogen or CO <sub>2</sub> underground storages and dynamics of bacteria population	<b>Yury Mizyakin</b> , Mikhail Panfilov, Mojdeh Rassoulzadeh	Page 665
MS03-7	Gas migration in argillaceous rock due to pathway dilation	<b>Martin Navarro</b>	Page 711
MS03-8	New experimental data and model to describe gas and water flow in Callovo-Oxfordian argillite: Simulation of gas migration in radioactive waste underground repository	Jean Talandier and <b>Jacques Wendling</b>	Page 853
<b>MS04</b>	<b>Non-Darcian Flow in Porous Media</b>	<b>Organizers: Azita Ahmadi-Senichault &amp; Didier Lasseux (ENSAM, Bordeaux, France)</b>	
MS04-1	Numerical modeling of anisothermal flow in a coupled reservoir-wellbore problem	<b>M. AMARA</b> , D. CAPATINA and L. LIZAIK	Page 105
MS04-2	Numerical simulations and asymptotic model for a Knudsen compressor	K. Aoki, P. Degond, <b>L. Mieussens</b> , S. Takata, and H. Yoshida	Page 157
MS04-3	On the modelling of the flow of generalised Newtonian fluids through anisotropic porous media	<b>Christian Geindreau</b> and Laurent Orgeas	Page 481
MS04-4	An investigation of inertial one-phase flow in homogeneous model porous media	<b>D. LASSEUX</b> , A. ABBASIAN ARANI and Azita AHMADI	Page 585
MS04-5	Kinetic modelling of the Klinkenberg effect: physical assumptions and mathematical developments	<b>V. Pavan</b>	Page 755
<b>MS05</b>	<b>Multi-Scale Description of Complex Flows in Heterogeneous and Fractured Porous Media</b>	<b>Organizer: Benoît Nœtinger (IFP, Rueil-Malmaison, France)</b>	
MS05-1	Characterisation of complex multi-phase flow regimes using pore-scale network modelling approach	<b>I. Bondino</b> , S. R. McDougall, C. Ezeuko and G. Hamon	Page 269
MS05-2	Multiscale Analysis of Reactive Transport in Homogeneous and Heterogeneous Porous Media	Debenest G. and <b>Quintard M.</b>	Page 345
MS05-3	Multiscale issues in geosciences in the context of oil, and gas storage industry	<b>B. Nœtinger</b> , A. Lange and A. Fourno	Page 717
MS05-4	Flow in multi-scale fracture networks: numerical optimization by use of a Mortar-like method	<b>G. Pichot</b> , J-R. de Dreuzy, J. Erhel and P. Davy	Page 761
MS05-5	Relation between the definition and properties of the equivalent permeability tensor in heterogeneous and fractured porous media	<b>P. Renard</b> and R. Ababou	Page 793
<b>MS06</b>	<b>Numerics and Upscaling of Fissured, Deformable, Partially Saturated Porous Media</b>	<b>Organizer: Rachid Ababou (IMF Toulouse, France)</b>	
MS06-1	Hydraulic modeling and upscaling of highly fissured 3D porous media with inertial effects	D. Bailly, R. Ababou and <b>M. Quintard</b>	Page 187
MS06-2	Numerical modeling and upscaling of a 3D fractured rock with Thermo-Hydro-Mechanical coupling	<b>I. CANAMON</b> , R. ABABOU and Fco. Javier ELORZA	Page 317
MS06-3	Three-dimensional numerical simulation of transient compressible flows in fractured formations	<b>V. Mourzenko</b> , I. Bogdanov, J.-F. Thovert and P.M. Adler	Page 689
MS06-4	Viscous flow and diffusion through a stressed self-affine fracture	Christophe VALLET, <b>Didier LASSEUX</b> , Philippe SAINSOT, Hassan ZAHOUANI and Jean Franois RIT	Page 877
<b>MS07</b>	<b>Water Resources/Ocean Engineering: Emphasis on Risks</b>	<b>Organizer: Driss Ouazar (EMI, Rabat, Morocco)</b>	
MS07-1	Simulation and control of the mechanical aeration process in a lake eutrophication problem	<b>Mohamed Abdelwahed</b> and Maatoug Hassine	Page 13
MS07-2	A collocation method using new combined radial basis functions for shallow water equations: Application to the lake Bouregreg (Morocco)	Y. Alhuri, A. Naji, D. Ouazar and <b>A. Taik</b>	Page 93
MS07-3	On the Global Existence for a Degenerate Elliptic-Parabolic Seawater Intrusion Problem	<b>Khalid Najib</b> , Carole Rosier	Page 707
MS07-4	Optimal groundwater management using swarm intelligence: a benchmark for three case studies	<b>Akram Sedki</b> and Driss Ouazar	Page 841
<b>MS08</b>	<b>Modeling Density Driven Flow in Porous Media</b>	<b>Organizer: Anis Younes (University of Strasbourg, France)</b>	
MS08-1	Analytical and numerical investigation of solute sedimentation in porous media using contour dynamics	<b>J. R. Angilella</b> , C. Oltean and M. Buès	Page 139
MS08-2	DENSITY-DEPENDENT FLOW AND MULTI-SPECIES REACTIVE TRANSPORT IN POROUS MEDIA: Salts and brine in saturated-unsaturated porous media	<b>Rachida BOUHLILA</b>	Page 281
MS08-3	The Role of Salt Sources in Density-Dependent Flow	<b>Juan Hidalgo</b> , Jesus Carrera and Agustin Medina	Page 515

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

MS08-4	Variable-Density Flow in Porous Media: Benchmark Experiments and Numerical Simulations	<a href="#">M. Konz</a> , P. Ackerer , A. Younes, P. Huggenberger and E. Zechner	Page 533
MS08-5	Efficient spatial and temporal discretizations for coupled fluid flow and heat or mass transport in porous media	<a href="#">Anis Younes</a>	Page 889
<b>MS09</b>	<b>Finite Volume Methods for the Numerical Simulation of Hydraulic Problems</b>	<b>Organizers: Fayssal Benkhaldoun &amp; Mohammed Seïd (University Paris 13, France, &amp; University of Durham, UK)</b>	
MS09-1	Development and evaluation of a finite volume model for hydraulic flows over movable beds	F. Benkhaldoun, <a href="#">S. Daoudi</a> , I. Elmahi, M. Seïd	Page 237
MS09-2	Combined characteristics and finite volume methods for dam-break problems	<a href="#">Fayssal Benkhaldoun</a> and Mohammed Seïd	Page 243
MS09-3	A Lagrange-Galerkin Finite-Element Method for Tidal Flow Simulations	<a href="#">Mofdi El-Amrani</a> and Mohammed Seïd	Page 399
MS09-4	High-Order Finite Volume Schemes for Shallow Water Flows	<a href="#">J. M. Gallardo</a> , M. Castro and Carlos Parés	Page 453
MS09-5	Finite volume simulation of the geostrophic adjustment in a rotating shallow water system	<a href="#">C. Parés</a> , M.J. Castro, and J.A. Lopez	Page 743
MS09-6	Numerical simulation of water flow at pipe-to-pipe intersections	<a href="#">Mohammed Seïd</a>	Page 835
<b>MS10</b>	<b>Adaptive Anisotropic Mesh Generation: Theory and Practical Aspects</b>	<b>Organizers: Abdellatif Agouzal &amp; Naima Debit (University of Lyon, Villeurbanne, France)</b>	
MS10-1	A Posteriori error analysis for anisotropic elliptic problem	<a href="#">B. Achchab</a> , A. Agouzal, A. Majdoubi and A. Souissi	Page 37
MS10-2	Edge-based a Posteriori error estimators for generation of d-dimensional quasi-optimal meshes	Abdellatif Agouzal, Konstantin Lipnikov and <a href="#">Yuri Vassilevski</a>	Page 71
MS10-3	Error indicator and mesh adaption in FreeFem++	<a href="#">F. Hecht</a> and R. Kuate	Page 511
MS10-4	ANISOTROPIC GOAL-ORIENTED MESH OPTIMISATION	A. Loseille, F. Alauzet, D. Guégan and <a href="#">A. Dervieux</a>	Page 611
MS10-5	Adaptive anisotropic parallel mesh adaptation with applications to interface capturing problems	Youssef Mesri, Hugues Digonnet and <a href="#">Thierry Coupez</a>	Page 649
<b>MS11</b>	<b>PDEs with Variable Nonlinearity: Analysis and Application</b>	<b>Organizer: Sergey Shmarev (University of Oviedo, Spain)</b>	
MS11-1	Nonlocal effects in homogenization of $p(x)$ -Laplacian in perforated domains	B. Amaziane, L. Pankratov, <a href="#">V. Prytula</a>	Page 127
MS11-2	Localization and Blow-up of Solutions to Parabolic Equations with Nonstandard Growth Conditions	<a href="#">Stanislav Antontsev</a> , Sergey Shmarev	Page 145
MS11-3	On a Doubly Nonlinear Parabolic Equation with Nonstandard Growth Conditions	Stanislav Antontsev, <a href="#">Sergey Shmarev</a>	Page 151
MS11-4	Homogenization of a Class of Quasilinear Elliptic Equations with Nonstandard Growth in High-Contrast Media	C. Choquet, <a href="#">L. Pankratov</a>	Web
MS11-5	An evolution nonlinear convection-diffusion problem arising in Audio-Signal Theory	B. Dugnol, C. Fernandez, G. Galiano and <a href="#">J. Velasco</a>	Page 377
MS11-6	Some recent contributions about a quasilinear and singular equation	<a href="#">Jacques Giacomoni</a>	
MS11-7	$p(x)$ -Harmonic Functions with Unbounded Exponent in a Subdomain	<a href="#">José Miguel Urbano</a>	Page 865
<b>MS12</b>	<b>Some Aspects of Inverse Problems and their Applications</b>	<b>Organizer: Mohamed El Alaoui Talibi (UCAM, Marrakech, Morocco)</b>	
MS12-1	Riccati-based Strategies For Feedback Boundary Stabilization of the 3D Navier-Stokes Equations	<a href="#">Mehdi Badra</a>	Page 175
MS12-2	An Inverse Conductivity Problem with a Single Measurement	<a href="#">A. El Badia</a> , T. Ha-Duong	Web
MS12-3	Topological Asymptotic Expansions for a Nonlinear Elliptic Equations with small Inclusions. Application to General Compressible Reynolds Equations	<a href="#">M. Jai</a> , I. Ciuperca, G.C. Buscaglia, M. El Alaoui Talibi	Web
MS12-4	Estimation and control of aerodynamic fluid flows	<a href="#">J. P. Raymond</a>	Page 785
MS12-5	Switching Controls	<a href="#">Enrique Zuazua</a>	Web
<b>MS13</b>	<b>Mathematical Analysis of Models in Porous Media</b>	<b>Organizers: Cédric Galusinski &amp; Mazen Saad (University of Toulon &amp; EC Nantes, France)</b>	
MS13-1	Equivalent Global pressure formulation for compressible flows: construction of a global capillary function	<a href="#">Guy Chavent</a> , Raphal Di Chiara and Gerhard Schafer	Page 333

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

MS13-2	Nuclear waste contamination in the basement: derivation and mathematical study of some pde's models	Catherine Choquet	Page 335
MS13-3	Degenerate Two-Phase Compressible Immiscible Flow In Porous Media	Ziad Khalil, Mazen Saad	Page 527
MS13-4	Dirichlet problem for a stochastic conservation law	Guy Vallet	Page 871
<b>MS14</b>	<b>Biomathematics: Modeling &amp; Imaging</b>	<b>Organizers: Charles Pierre &amp; Franck Plouraboué (University of Pau &amp; IMF Toulouse, France)</b>	
MS14-1	Modelling hematopoiesis mediated by growth factors with applications to hematological diseases	Mostapha Adimy	Web
MS14-2	Modeling Imatinib Resistance and Suboptimal Response in Chronic Myeloid Leukemia	B. Ainseba, M. Adimy, C. Benosman	Web
MS14-3	Optimal recovery of the electrical activity of a disease heart	Laurent Dumas, Linda El Alaoui and J.F. Gerbeau	Page 383
MS14-4	A new mixed-formulation for eigenvalue convection-diffusion problems	Charles Pierre, Franck Plouraboué	Page 767
MS14-5	Simulating the cardiac electrical activity using medical CT Scan images: models study and computational aspects	Charles Pierre, Olivier Rousseau	Page 773
<b>MS15</b>	<b>Computational Methods for Stochastic PDEs</b>	<b>Organizer: Hassan Manouzi (University of Laval, Quebec, Canada)</b>	
MS15-1	Monte Carlo methods for discontinuous media	Antoine Lejay	Page 591
MS15-2	SPDEs Driven by multiplicative White Noise: A Numerical Analysis	Hassan Manouzi	Page 635
MS15-3	Stochastic Arps models for curve decline	Christian Paroissin	Page 749
<b>MS16</b>	<b>Stochastic Methods for Environment Ecological Systems: Study and Applications</b>	<b>Organizer: Simplice Dossou-Gbété (University of Pau, France)</b>	
MS16-1	Bayesian approaches to modelling chronologies from ice cores	P. G. Blackwell, C. E. Buck, K. Klauenberg, J. J. Wheatley and R. Rothlisberger	Web
MS16-2	A spatially explicit Markovian individual-based model for terrestrial plant dynamics	Fabien Campillo, Marc Joannides	Page 313
MS16-3	Fitting statistical models to environmental datasets by data-based matrix factorization: an overview	Simplice Dossou-Gbété	Page 365
MS16-4	Phytoplankton aggregation: from the behaviour of cells to a nonlinear stochastic partial differential equation	Nadjia El Saadi	Page 411
MS16-5	Data assimilation for real-time estimation of hydraulic states and unmeasured perturbations in a 1D hydrodynamic model	P.O. Malaterre, N. Jean-Baptiste, Ch. Dorée and J. Sau	Page 629
<b>AM</b>	<b>Approximation Methods</b>		
AM-1	On Conservative Approximation via Summability	F. Aguilera, D. Cárdenas-Morales and P. Garrancho	Page 77
AM-2	Bootstrapping Rao's statistic for testing uniform association in cross-classifications	V. Alba-Fernández and M.D. Jiménez-Gamero	Page 87
AM-3	Convergence and error estimates for polyharmonic Div-curl splines and elastic splines	M.N. Benbourhim and A. Bouhamidi	Page 219
AM-4	Resolution of elliptic problems in a polygonal domain using bivariate splines on Powell-Sabin triangulations	M.A. Fortes, P. Gonzalez, M. J. Ibanez and M. Pasadas	Page 439
AM-5	Multiresolution analysis and supercompact multiwavelets over uniform Powell-Sabin meshes	Miguel Ángel Fortes and María Moncayo	Page 435
AM-6	Saturation and Asymptotic condition in simultaneous approximation	P. Garrancho and D. Cardenas Morales	Page 477
AM-7	Comparison of Operator-Fitted methods for Singularly Perturbed Advection-Diffusion-Reaction Problems	Iva Kavčič, Mladen Rogina and Tina Bosner	Page 521
AM-8	Numerical solution of integral equations of the second kind by using a variational method and cubic splines	A. Kouibia, M. Pasadas and M. L. Rodriguez	Page 543
AM-9	L-Spline Collocation Methods for Fredholm Integro-Differential Equations with Weakly Singular Kernels	A. Lamnii, H. Mraoui and D. Sbibih	Page 567
AM-10	Approximation properties of wavelet bases of the interval	Zouhir Mokhtari and Khaled Melkemi	Page 677
AM-11	An approximation method to derive confidence intervals for quantiles. Application to height median estimation of pines	M. Rueda, A. Arcos, J.F. Muñoz	Page 805

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

AM-12	Indirect estimation of proportions in natural resource surveys	Rueda M., Muñoz J.F., Arcos A., <a href="#">Alvarez E.</a>	Page 809
AM-13	A superconvergent quadrature rule based on a spline quasi-interpolant with application to Fredholm integral equations	P. Sablonnière, <a href="#">D. Sbibih</a> and M. Tahrichi	Page 819
AM-14	Normalized trivariate Powell-Sabin B-splines	D. Sbibih, <a href="#">A. Serghini</a> and A. Tijini	Page 829
AM-15	Sharp quantitative bounds for digital terrain modelling by interpolatory subdivision schemes	Sergio Amat, <a href="#">María Moncayo</a> and J.F. Reinoso	Page 109
<b>NM</b>	<b>Numerical Methods &amp; PDEs</b>		
NM-1	Modeling Long-Time Peatland Subsidence in a Venice Lagoon Catchment, Italy	<a href="#">Francesca Zanello</a> , Pietro Teatini, Mario Putti and Giuseppe Gambolati	Page 897
NM-2	Homogenisation approach to an inverse problem for wave equation	<a href="#">Marko Vrdoljak</a>	Page 883
NM-3	Numerical Coupling of Multiphysics Flows in Porous Media	<a href="#">E. Abreu</a> and D. Conceição	Page 19
NM-4	Quasi-Optimal Triangulations for Gradient Nonconforming Interpolates of Piecewise Regular functions	Abdellatif Agouzal and <a href="#">Naima Debit</a>	Page 67
NM-5	Assessment of Numerical Schemes Solving Groundwater Flow Problems	<a href="#">A. Aharmouch</a> , B. Amaziane	Page 81
NM-6	Surface Improvement for Reservoir Modelling	<a href="#">A. Bac</a> M. Daniel J.F. Rainaud and N.V. Tran†	Page 163
NM-7	A new DG method for the Stokes problem with a priori and a Posteriori error analysis	Roland Becker, Daniela Capatina and <a href="#">Julie Joie</a>	Page 199
NM-8	A discontinuous Galerkin Method for the Navier-Stokes Equations with Different Boundary Conditions	Roland Becker, <a href="#">Nour-El-Houda Seloula</a>	Page 203
NM-9	Multidimensional Refinement Indicators for adaptive parameterization	<a href="#">Hend BenAmeur</a> , François Clément, Guy Chavent and Pierre Weis	Page 213
NM-10	An augmented DP-FETI non overlapping domain decomposition method for the Stokes problem	<a href="#">H. Benhassine</a> and A. Bendali	Page 225
NM-11	Numerical analysis of multidimensional fracture flow	<a href="#">Jan Brezina</a>	Page 293
NM-12	Relationship between local non-equilibrium models for mass transport in two-phase porous media	<a href="#">Yohan Davit</a> , Gérald Debenest, Sabine Sauvage and Michel Quintard	Page 339
NM-13	Nonlinear diffusion equations of higher order	Bertram Düring, Daniel Matthes and <a href="#">Pina Milisic</a>	Page 389
NM-14	New trends in Multi-Scale Simulation using Hybrid Grid-Particle Vortex Methods	<a href="#">Mustapha El Ossmani</a> and Philippe Poncet	Page 405
NM-15	Advances in Pore-Scale Simulations using the Unfitted Discontinuous Galerkin method	<a href="#">Christian Engwer</a> , Jorrit Fahlke	Page 415
NM-16	Theoretical analysis for modeling fractures as interfaces with nonconforming grids	<a href="#">N. Frih</a> , J.E. Roberts and Ali Saâda	Page 445
NM-17	Identification of aquifer transmissivities from hydraulic heads interior measurements	<a href="#">Najla Tlatli Hariga</a> , Rachida Bouhlila and Amel Ben Abda	Page 505
NM-18	A 2D two layer shallow water finite volume model for tidally induced currents in the Strait of Gibraltar	<a href="#">J. Macías</a> , M.J. Castro, J.M. González-Vida, and C. Parés	Page 617
NM-19	Solution of miscible displacement in porous media by mixed finite element method and a combined finite volume-finite element method	<a href="#">Mohammed Shuker Mahmood</a>	Page 623
NM-20	Transport parameter estimation in hydro-geological media	<a href="#">T. Migliore</a> , D. Auroux, J. Blum, L. Loth, D. Coelho	Page 661
NM-21	On Nonlinear Reaction-Diffusion Ecological Models in Domains with Rough Boundaries	C. Mocenni, <a href="#">E. Sparacino</a> and J.P. Zubelli	Page 671
NM-22	Validation of a Navier Stokes VOF solver used to simulate impulse waves generated by mass failure	<a href="#">Denis Morichon</a> , Stéphane Abadie, Stéphane Glockner and Stéphane Grilli	Page 683
NM-23	Simulation of Heat Transfer With Phase Change in 3D Saturated Porous Media	<a href="#">Mohamad Muhieddine</a> , Edouard Canot and Ramiro March	Page 701
NM-24	Numerical solution of elliptic equations by a hybrid diamond/discrete duality finite volume scheme	<a href="#">Pascal Omnes</a>	Page 731
NM-25	A Fundamental Solution Method for Modeling Thin Geological Barriers	<a href="#">L. Quintero-Perez</a> and J.M Guevara-Jordan	Page 779

**MAMERN09, Pau (France), 8-11 June 2009**  
**List of Plenary Lectures, MiniSymposia, Contributed Talks & Posters – June 1st, 2009**

NM-26	Numerical Modeling of Submarine Hydrothermal Reservoirs	<a href="#">Mario-César Suárez</a> A. and Fernando Samaniego	Page 847
<b>ST</b>	<b>Statistics &amp; Stochastic Methods</b>		
ST-1	Wavelets, a numerical tool for atmospheric data analysis	<a href="#">Patrick Fischer</a> and Ka-Kit Tung	Page 429
ST-2	Numerical solution of a free boundary problem associated to investments with irreversible environmental effects	Antonio Acción, <a href="#">Iñigo Arregui</a> and Carlos Vázquez	Page 32
ST-3	Kriging-based subdivision schemes : application to the reconstruction of non-regular environmental data	Jean Baccou, <a href="#">Jacques Liandrat</a>	Page 169
ST-4	Mathematical Computation of Nash Model Parameters for Hydrograph Prediction	<a href="#">Abdolreza Bahremand</a> and Raoof Mostafazadeh1	Page 181
ST-5	Two Stage Design for Estimating the Reliability of Series/Parallel Systems	Zohra Benkamra, Mekki Terbeche and <a href="#">Mounir Tlemcani</a>	Page 231
ST-6	Using stochastic finite element in geostatistics and diffusion convection equation	<a href="#">Aida Bode</a> and Skender Osmani	Page 259
ST-7	Mass transport with sorption in porous media	J. Golder, M. Joelson and <a href="#">M.C. Néel</a>	Page 493
ST-8	Atmospheric Retention of Man-made CO <sub>2</sub> Emissions	<a href="#">Bert W. Rust</a>	Page 813
	<b>Posters</b>		
Poster	Computing differential quasi-interpolants from the B-form of B-splines	A. Abbadi, D. Barrera, <a href="#">M.J. Ibáñez</a> , D. Sbibih	Page 7
Poster	Numerical solution of Inverse Cauchy problem by Finite Volume method	<a href="#">Mohammed Afif</a> and Mostafa Jourhmane	Page 49
Poster	A comparison of last generation cell centered finite volume methods on challenging three dimensional problems	Léo Agélas, <a href="#">Daniele A. Di Pietro</a> and Ivan Kapyrin	Page 61
Poster	A modified Kulkarni's method based on a quadratic spline quasi-interpolant	<a href="#">C. Allouch</a> , P. Sablonnière and D. Sbibih	Page 99
Poster	On a non-standard class of bivariate differential quasi-interpolants : Error analysis	<a href="#">D. Barrera</a> , A. Guessab, M.J. Ibáñez, O. Nouisser	Page 193
Poster	Constructing blending parametric surfaces via T-curves with normal curvature continuous	B. Belkhatir, D. Sbibih and <a href="#">A. Zidna</a>	Page 209
Poster	Modelling of Bio processes Using Artificial Neural Networks: Application to the Biosynthesis of Pleuromutilin Antibiotic Produced by Pleurotus mutilis	<a href="#">O. Benkortbi</a> , M. Laidi and S. Hanini	Page 249
Poster	Determination of the Soil Hydraulic Functions Parameters using the Multi-Step Outflow Experiment	<a href="#">Chiraz Bnouini</a> , Jalila Sghaier and Habib Sammouda	Page 253
Poster	THERMAL BUCKLING OF SIGMOID FUNCTIONALLY GRADED PLATES USING FIRST ORDER SHEAR DEFORMATION THEORY	<a href="#">M. BOUAZZA</a> , A. TOUNSI, E.A. ADDA-BEDIA, A. MEGUENI	
Poster	Surface Waves Filtering Using Continuous Wavelet Transform	<a href="#">Bougouern.A</a> , Belguermi .C	Page 275
Poster	Modelling a sustainable use of the natural resources and the renewable sources of energy	<a href="#">Blanca Luisa Delgado Marquez</a>	Page 351
Poster	Simulation and analysis of the dynamics of a population of sardine along the Moroccan Atlantic coasts	M. Derouich, M. Serghini and <a href="#">A. Boutayeb</a>	Page 357
Poster	Audio signal parameter estimation via a PDE model	B. Dugnol, C. Fenández, <a href="#">G. Galiano</a> and J. Velasco	Page 371
Poster	A hole filling method for parametric surfaces by using C 1-Powell Sabin splines	M.A. Fortes, P. Gonzalez, M. Pasadas and <a href="#">M.L. Rodriguez</a>	Page 441
Poster	The Identification of Pollution Sources Using a PLS Linear Regression Technique	<a href="#">Abdelmalek Kouadri</a> and Abdallah Namoune	Page 539
Poster	Geometric continuity C1G2 of blending surfaces	<a href="#">A. Kouibia</a> , M. Pasadas and B. Belkhatir, D. Sbibih, A. Zidna	Page 547
Poster	Analysis and surface treatment. Application to design of non-standard forms	<a href="#">M. L. Márquez-García</a> and A. Delgado	Page 641
Poster	Numerical modeling of the glass eel behavior in estuary: case of the Adour estuary	<a href="#">Marc Odunlami</a> and Patrick Prouzet	Page 725
Poster	Nonparametric mean estimation with categorical and continuous data: an empirical study	<a href="#">I. Sanchez-Borrego</a> and M. Rueda	Page 825