

Conference Program

Plenary Lecture	MS: MiniSymposium	AM: Approximation Methods	NM: Numerical Methods & PDEs	ST: Statistics & Stochastic
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Sunday June 7

Time	
02:00 - 07:00 pm	Registration (IPRA)

Monday June 8

Time			
08:00 - 09:00 am	Registration (Hall UFR Sciences et Techniques)		
09:00 - 09:30 am	Opening Ceremony (Amphi A)		
09:30 - 10:15 am	Plenary Lecture (Amphi A)		
10:15 - 10:40 am	Coffee Break		
	Session I: MS06 (Amphi A) Chair: Rachid Ababou	Session II: MS13 (Amphi C) Chair: Mazen Saad	Session III: AM (Amphi D) Chair:
10:40 - 11:05 am	MS06-1	MS13-1	AM-1
11:05 - 11:30 am	MS06-2	MS13-2	AM-2
11:30 - 11:55 am	MS06-3	MS13-3	AM-3
11:55 - 12:20 pm	MS06-4	MS13-4	AM-4
12:20 - 02:00 pm	Lunch (Restaurant La Vague)		
02:00 - 02:45 pm	Plenary Lecture (Amphi A)		
	Session I: MS09 (Amphi A) Chair: F. Benkhaldoun & M. Seaïd	Session II: MS11 (Amphi C) Chair: Sergey Shmarev	Session III: AM (Amphi D) Chair:
02:45 - 03:10 pm	MS09-1	MS11-1	AM-5
03:10 - 04:35 pm	MS09-2	MS11-2	AM-6
04:35 - 05:00 pm	MS09-3	MS11-3	AM-7
05:00 - 05:30 pm	Coffee Break		
	Session I: MS09 (Amphi A) Chair: F. Benkhaldoun & M. Seaïd	Session II: MS11 (Amphi C) Chair: Sergey Shmarev	Session III: NM (Amphi D) Chair:
05:30 - 05:55 pm	MS09-4	MS11-4	NM-1
05:55 - 06:20 pm	MS09-5	MS11-5	NM-2
06:20 - 06:45 pm	MS09-6	MS11-6	NM-3
06:45 - 07:10 pm		MS11-7	NM-4

Tuesday June 9

Time			
08:00 - 08:45 am	Plenary Lecture (Amphi A)		
	Session I: MS02 (Amphi A) Chair: Anthony Michel	Session II: MS15 (Amphi C) Chair: Hassan Manouzi	Session III: NM (Amphi D) Chair:
08:45 - 09:10 am	MS02-1	MS15-1	NM-5
09:10 - 09:35 am	MS02-2	MS15-2	NM-6
09:35 - 10:00 am	MS02-3	MS15-3	NM-7
10:00 - 10:25 am	Coffee Break		
	Session I: MS02 (Amphi A) Chair: Anthony Michel	Session II: MS04 (Amphi C) Chair: A. Ahmadi & D. Lasseux	Session III: NM (Amphi D) Chair:
10:25 - 10:50 am	MS02-4	MS04-1	NM-8
10:50 - 11:15 am	MS02-5	MS04-2	NM-9
11:15 - 11:40 am	MS02-6	MS04-3	NM-10
11:40 - 12:05 pm	MS02-7	MS04-4	NM-11
12:05 - 12:30 pm		MS04-5	NM-12
12:30 - 02:00 pm	Lunch (Restaurant La Vague)		
02:00 - 02:45 pm	Plenary Lecture (Amphi A)		
	Session I: MS03 (Amphi A) Chair: Brahim Amaziane	Session II: AM (Amphi C) Chair:	Session III: NM (Amphi D) Chair:
02:45 - 03:10 pm	MS03-1	AM-8	NM-13
03:10 - 04:35 pm	MS03-2	AM-9	NM-14
04:35 - 05:00 pm	MS03-3	AM-10	NM-15
05:00 - 05:30 pm	Coffee Break		
05:30 - 05:55 pm	MS03-4	AM-11	NM-16
05:55 - 06:20 pm	MS03-5	AM-12	NM-17
06:20 - 06:45 pm	MS03-6	Posters Session (Hall UFR Sciences)	
06:45 - 07:10 pm	MS03-7		
07:10 - 07:35 pm	MS03-8		

Wednesday June 10

08:00 - 08:45 am	Plenary Lecture (Amphi A)		
08:45 - 09:30 am	Plenary Lecture (Amphi A)		
	Session I: MS05 (Amphi A) Chair: Benoît Noetinger	Session II: MS12 (Amphi C) Chair: Mohamed El Alaoui	Session III: MS14 (Amphi D) Chair: C. Pierre & F. Plouraboué
09:30 - 09:55 am	MS05-1	MS12-1	MS14-1
09:55 - 10:20 am	MS05-2	MS12-2	MS14-2
10:20 - 10:50 am	Coffee Break		
	Session I: MS05 (Amphi A) Chair: Benoît Noetinger	Session II: MS12 (Amphi C) Chair: Mohamed El Alaoui	Session III: MS14 (Amphi D) Chair: C. Pierre & F. Plouraboué
10:50 - 11:15 am	MS05-3	MS12-3	MS14-3
11:15 - 11:40 am	MS05-4	MS12-4	MS14-4
11:40 - 12:05 pm	MS05-5	MS12-5	MS14-5
12:20 - 02:00 pm	Lunch (Restaurant La Vague)		
	Session I: MS07 (Amphi A) Chair: Driss Ouazar	Session II: AM (Amphi C) Chair:	Session III: ST (Amphi D) Chair:
02:00 - 02:25 pm	MS07-1	AM-13	ST-1
02:25 - 02:50 pm	MS07-2	AM-14	ST-2
02:50 - 03:15 pm	MS07-3	AM-15	ST-3
03:15 - 03:40 pm	MS07-4		ST-4
03:40 - 04:00 pm	Coffee Break		
04:30 - 07:30 pm	Visit: History, short stories of Pau and his Castle.		
08:15 pm	Gala Dinner: Restaurant La Concha - Place Verdun - 36, Rue Liège 64000 Pau- Phone: +33 559275509		

Thursday June 11

08:00 - 08:45 am	Plenary Lecture (Amphi A)		
08:45 - 09:30 am	Plenary Lecture (Amphi A)		
	Session I: MS08 (Amphi A) Chair: Anis Younes	Session II: MS16 (Amphi C) Chair: Simplicie Dossou-Gbété	Session III: NM (Amphi D) Chair:
09:30 - 09:55 am	MS08-1	MS16-1	NM-18
09:55 - 10:20 am	MS08-2	MS16-2	NM-19
10:20 - 10:45 am	Coffee Break		
	Session I: MS08 (Amphi A) Chair: Anis Younes	Session II: MS16 (Amphi C) Chair: Simplicie Dossou-Gbété	Session III: NM (Amphi D) Chair:
10:45 - 11:10 am	MS08-3	MS16-3	NM-20
11:10 - 11:35 am	MS08-4	MS16-4	NM-21
11:35 - 12:00 pm	MS08-5	MS16-5	NM-22
12:00 - 12:25 pm			NM-23
12:25 - 02:00 pm	Lunch (Restaurant La Vague)		
	Session I: MS01 (Amphi A) Chair: Arjan Kamp	Session II: MS10 (Amphi C) Chair: A. Agouzal & N. Debit	Session III: ST (Amphi D) Chair:
02:00 - 02:25 pm	MS01-1	MS10-1	ST-5
02:25 - 02:50 pm	MS01-2	MS10-2	ST-6
02:50 - 03:15 pm	MS01-3	MS10-3	ST-7
03:15 - 03:40 pm	MS01-4	MS10-4	ST-8
03:40 - 04:00 pm	Coffee Break		
	Session I: MS01 (Amphi A) Chair: Arjan Kamp	Session II: MS10 (Amphi C) Chair: A. Agouzal & N. Debit	Session III: NM (Amphi D) Chair:
04:00 - 04:25 pm	MS01-5	MS10-5	NM-24
04:25 - 04:50 pm	MS01-6		NM-25
04:50 - 05:15 pm			NM-26

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

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MS03-5	Numerical Simulation of Two Phase Flow in Porous Media in a Context of High Performance Computing	Florian Caro , Alain Genty, Eli Laucoin and Bilal Saad	Page 323
MS03-6	Nonlinear reactive waves in hydrogen or CO2 underground storages and dynamics of bacteria population	Yury Mizyakin , Mikhail Panfilov, Mojdeh Rassoulzadeh	Page 665
MS03-7	Gas migration in argillaceous rock due to pathway dilation	Martin Navarro	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 Jacques Wendling	Page 853
MS04	Non-Darcian Flow in Porous Media	Organizers: Azita Ahmadi-Senichault & Didier Lasseux (ENSAM, Bordeaux, France)	
MS04-1	Numerical modeling of anisothermal flow in a coupled reservoir-wellbore problem	M. AMARA , D. CAPATINA and L. LIZAIK	Page 105
MS04-2	Numerical simulations and asymptotic model for a Knudsen compressor	K. Aoki, P. Degond, L. Mieussens , S. Takata, and H. Yoshida	Page 157
MS04-3	On the modelling of the flow of generalised Newtonian fluids through anisotropic porous media	Christian Geindreau and Laurent Orgeas	Page 481
MS04-4	An investigation of inertial one-phase flow in homogeneous model porous media	D. LASSEUX , A. ABBASIAN ARANI and Azita AHMADI	Page 585
MS04-5	Kinetic modelling of the Klinkenberg effect: physical assumptions and mathematical developments	V. Pavan	Page 755
MS05	Multi-Scale Description of Complex Flows in Heterogeneous and Fractured Porous Media	Organizer: Benoît Noetinger (IFP, Rueil-Malmaison, France)	
MS05-1	Characterisation of complex multi-phase flow regimes using pore-scale network modelling approach	I. Bondino , 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 Quintard M.	Page 345
MS05-3	Multiscale issues in geosciences in the context of oil, and gas storage industry	B. Noetinger , A. Lange and A. Fournio	Page 717
MS05-4	Flow in multi-scale fracture networks: numerical optimization by use of a Mortar-like method	G. Pichot , 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	P. Renard and R. Ababou	Page 793
MS06	Numerics and Upscaling of Fissured, Deformable, Partially Saturated Porous Media	Organizer: Rachid Ababou (IMF Toulouse, France)	
MS06-1	Hydraulic modeling and upscaling of highly fissured 3D porous media with inertial effects	D. Bailly, R. Ababou and M. Quintard	Page 187
MS06-2	Numerical modeling and upscaling of a 3D fractured rock with Thermo-Hydro-Mechanical coupling	I. CANAMON , R. ABABOU and Fco. Javier ELORZA	Page 317
MS06-3	Three-dimensional numerical simulation of transient compressible flows in fractured formations	V. Mourzenko , 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, Didier LASSEUX , Philippe SAINOT, Hassan ZAHOUANI and Jean Franois RIT	Page 877
MS07	Water Resources/Ocean Engineering: Emphasis on Risks	Organizer: Driss Ouazar (EMI, Rabat, Morocco)	
MS07-1	Simulation and control of the mechanical aeration process in a lake eutrophication problem	Mohamed Abdelwahed 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 A. Taik	Page 93
MS07-3	On the Global Existence for a Degenerate Elliptic-Parabolic Seawater Intrusion Problem	Khalid Najib , Carole Rosier	Page 707
MS07-4	Optimal groundwater management using swarm intelligence: a benchmark for three case studies	Akram Sedki and Driss Ouazar	Page 841
MS08	Modeling Density Driven Flow in Porous Media	Organizer: Anis Younes (University of Strasbourg, France)	
MS08-1	Analytical and numerical investigation of solute sedimentation in porous media using contour dynamics	J. R. Angilella , 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	Rachida BOUHLILA	Page 281
MS08-3	The Role of Salt Sources in Density-Dependent Flow	Juan Hidalgo , Jesus Carrera and Agustin Medina	Page 515

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

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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
MS14	Biomathematics: Modeling & Imaging	Organizers: Charles Pierre & Franck Plouraboué (University of Pau & IMF Toulouse, France)	
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
MS15	Computational Methods for Stochastic PDEs	Organizer: Hassan Manouzi (University of Laval, Quebec, Canada)	
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
MS16	Stochastic Methods for Environment Ecological Systems: Study and Applications	Organizer: Simplice Dossou-Gbété (University of Pau, France)	
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
AM	Approximation Methods		
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. Lamni , H. Mraoui and D. Sbibi	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

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AM-12	Indirect estimation of proportions in natural resource surveys	Rueda M., Muñoz J.F., Arcos A., Alvarez E.	Page 809
AM-13	A superconvergent quadrature rule based on a spline quasi-interpolant with application to Fredholm integral equations	P. Sablonnière, D. Sbibih and M. Tahrichi	Page 819
AM-14	Normalized trivariate Powell-Sabin B-splines	D. Sbibih, A. Serghini and A. Tijini	Page 829
AM-15	Sharp quantitative bounds for digital terrain modelling by interpolatory subdivision schemes	Sergio Amat, María Moncayo and J.F. Reinoso	Page 109
NM	Numerical Methods & PDEs		
NM-1	Modeling Long-Time Peatland Subsidence in a Venice Lagoon Catchment, Italy	Francesca Zanello , Pietro Teatini, Mario Putti and Giuseppe Gambolati	Page 897
NM-2	Homogenisation approach to an inverse problem for wave equation	Marko Vrdoljak	Page 883
NM-3	Numerical Coupling of Multiphysics Flows in Porous Media	E. Abreu and D. Conceição	Page 19
NM-4	Quasi-Optimal Triangulations for Gradient Nonconforming Interpolates of Piecewise Regular functions	Abdellatif Agouzal and Naima Debit	Page 67
NM-5	Assessment of Numerical Schemes Solving Groundwater Flow Problems	A. Aharmouch , B. Amaziane	Page 81
NM-6	Surface Improvement for Reservoir Modelling	A. Bac M. Daniel J.F. Rainaud and N.V. Tran†	Page 163
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