

PROGRAM ECCOMAS INTERNATIONAL CONFERENCE ON MESHLESS METHODS Lisboa, 11-14 July 2005

Monday, July 11		Tuesday, July 12		Wednesday, July 13		Thursday, July 14	
08h00-09h00 <i>Reception/Registration</i>							
SESSION A1 Chairman: R. Schaback		SESSION A2 Chairman: J. S. Chen		SESSION A3 Chairman: E. J. Kansa		SESSION A4 Chairman: G. Fashauer	
09h00-09h20	Opening Session Vice-President of LNEC: Prof. Carlos Pina Prof. E. R. Arantes e Oliveira	09h00-09h30	Convergence and error analysis of variations of Kansa's unsymmetric collocation method	09h00-09h30	Stabilized and Regularized Galerkin Meshfree Method	09h00-09h30	The role of multiquadric shape parameters in the numerical solution of PDEs
09h20-09h50	Bridging Scale and Multiresolution Methods Wing Kam Liu	09h30-10h00	Multiscale flow simulation by meshless particle methods	09h30-10h00	Stabilized updated Lagrangian corrected SPH for explicit dynamic problems	09h30-10h00	Radial Basis Functions: Applications and Recent Results on Interpolation Martin Buhmann
09h50-10h20	Geometrically exact analysis of space frames by a meshless method P. Pimenta, C.M. Tiago	10h00-10h20	A particle based p-version Galerkin method	10h00-10h20	SPH biphasic simulation of free surface impact	10h00-10h20	Coupling natural element methods and model reduction techniques D. Ryckelynck, F. Chinesta, E. Cueto
10h20-10h40	Point collocation methods using reproducing kernel approximations for the solution of the Stokes equations P. Joyot, J. Trunzler, F. Chinesta	10h20-10h40	A Hermite natural element formulation	10h20-10h40	On a new incompressible formulation for SPH	10h20-10h40	Greedy unsymmetric collocation P. Nair
10h40-11h00	Coffee-break	10h40-11h00	Coffee-break	10h40-11h00	Coffee-break	10h40-11h00	Coffee-break

SESSION B1		SESSION B2		SESSION B3		SESSION B4					
Chairman: Suvranu De		Chairman: I. Herrera		Chairman: Z. M. Wu		Chairman: C. S. Chen					
11h00-11h30	Meshfree scattered data quasi-interpolation	Z.M.Wu, J.P.Liu	11h00-11h30	On the use of genetic algorithms for numerical integration in meshfree methods	Suvranu De	11h00-11h30	Radial Basis Function Interpolation versus Iterated Moving Least Squares Approximation	G.Fasshauer, J.G.Zhang	11h00-11h30	A Global-Local Approach for the Construction of Enrichment Functions for the Generalized FEM and Its Application to Propagating	C.A.Duarte, I.Babuska
11h30-12h00	Global and Local Meshless Schemes Based on Multi-Elliptic Interpolation	C.Gaspar	11h30-12h00	Generalized finite element method in mixed variational formulation: a study of convergence and stability	W.Góis, S.P.B.Proença	11h30-12h00	A mesh free approach to solving the axisymmetric Poisson's equation	C.S.Chen, A.Muleshkov, M.A.Golberg	11h30-12h00	Using RBF in a finite difference mode: multidimensional upwinding, hybrid schemes and fluid dynamics calculations	A.Tolstykh, D.A.Shirobokov
12h00-12h20	Incompressible smoothed particle hydrodynamics using a Clebsch-Weber decomposition	M.Lasiwka, M.Basa, N.Quinlan	12h00-12h20	Improvement of the accuracy in XFEM methods	P.Laborde, J.Pommier, Y.Renard, M.Salaun	12h00-12h20	Least square meshfree formulations for incompressible granular flows	A.Patra, A.Paliwal, M.Tiwari	12h00-12h20	A Kansa type method using fundamental solutions applied to elliptic PDEs	C.J.S.Alves, S.S.Vaitchev
12h20-12h40	A multilevel adaptive particle-grid method for gas dynamics	G.H.Cottet, B.Rebourcet, L.Weynans	12h20-12h40	A generalized finite difference method for elliptical and truncated waveguide analysis	M.A.Garcia-March, F.Gimenez, F.R.Villatoro, J.A.Monsoriu, P.F.Cordoba	12h20-12h40	A particle based high-resolution method for linear convection problems	A.Smolianski, O.Shipilova, H.Haarrio	12h20-12h40	On trigonometric shear deformations and radial basis functions in the analysis of composite plates	A.J.M.Ferreira, C.M.C.Roque, R.M.N.Jorge
12h40-14h00	Lunch		12h40-14h00	Lunch		12h40-14h00	Lunch		12h40-14h00	Lunch	

SESSION C1		SESSION C2		SESSION C3		SESSION C4	
Chairman: W. K. Liu		Chairman: J. T. Chen		Chairman: A. Iske		Chairman: M. Buhmann	
14h00-14h30	General Theory of Galerkin-Discontinuous Methods	14h00-14h30	Local Implicit Radial Basis Function Collocation Method for Transport Phenomena	14h00-14h30	True and spurious eigensolutions for membrane and plate problems by using method of fundamental solutions	14h00-14h30	Stochastic models and radial basis functions interpolators
	<i>Ismael Herrera</i>		<i>Bozidar Sarler</i>		<i>J.T.Chen, Y.T.Le</i>		<i>Donald E. Myers</i>
14h30-15h00	Application of evolutionary algorithms for optimization of method parameters in solution of Poisson's equation	14h30-15h00	Spectral-like accuracy in space of a meshless vortex method	14h30-15h00	On the procedures to eliminate shear locking in meshless methods	14h30-15h00	Dimensional effect on RBF approximation
	<i>J.A.Kolodziej, T.Kliekel</i>		<i>L.A.Barba</i>		<i>C.M.Tiago, V.M.A.Leitão</i>		<i>Wen Chen, L.J.Shen, Z.J.Chen</i>
15h00-15h20	On smooth volume approach, integral conservation law, and upwind scheme with monotonic reconstruction	15h00-15h20	On the high-level error bound for multiquadric and inverse multiquadric interpolations	15h00-15h20	The method of fundamental solutions of the magnetohydrodynamic flow	15h00-15h20	Multiscale meshless method for fracture simulations
	<i>T.Z.Ismagilov</i>		<i>Lin-Tian Luh</i>		<i>C.Erdonmez, M.Tezer-Sezgin, H.Saygin</i>		<i>X.S.Yang, J.M.Lees, C.T.Morley</i>
15h20-15h40	Resolution of time-dependent equations by the generalized finite difference method	15h20-15h40	Option pricing using radial basis functions	15h20-15h40	The Method of Fundamental Solutions applied to the numerical calculation of eigenfrequencies and eigenmodes of	15h20-15h40	A new moving least-squares meshless method for initial-boundary value partial differential equations
	<i>J.J.Benito, L.Gavete, F.Ureña, B.Alonso</i>		<i>U.Petterson, E.Larsson, G.Marcusson, J.Persson</i>		<i>C.J.S.Alves, P.R.S.Antunes</i>		<i>C.D.Blakely</i>
15h40-16h00	Coffee-break	15h40-16h00	Coffee-break	15h40-16h00	Coffee-break	15h40-16h00	Coffee-break

SESSION D1 Chairman: Wen Chen		SESSION D2 Chairman: B. Sarler		SESSION D3 Chairman: C. Gaspar		SESSION D4 Chairman: S. M. Holzer					
16h00-16h20	Simulation of forming processes by the a-shapes-based natural element method	I. Alfaro, D. González, D. Bel, E. Cueto, M. Doblaré, F. Chinesta	16h00-16h20	Comparison between multiquadric collocation method and finite difference method in solving the Poisson problem	S. Chantasiirawan	16h00-16h20	Moving least square for a posteriori error estimation	L. Gavete, B. Alonso, F. Ureña, J.J. Benito	16h00-16h20	Improving time integration method of CSPM meshless method in two dimensional elastodynamic problems	H.O.Hosseini, S.Mohammadi
16h20-16h40	Non-linear analysis of plates resorting to the EFGM	J.Belinha, L.M.Dinis	16h20-16h40	A Lagrangian Finite Point Method Solving Two-dimensional Fluid Dynamic Problems	Z.Shen, L.Shen, Guixia Lv, Wen Chen	16h20-16h40	The stabilized Bar method in the element free Galerkin context	D.P.Recio, R.Natal Jorge, L.M.Dinis	16h20-16h40	Modelling crack in orthotropic medium using extended finite element method	A.Asadpoure, S.Mohammadi, A.Vafai
16h40-17h00	Combined FEM/Meshfree SPH method for impact damage prediction of composite sandwich panels	L.Aktay, A.F.Johnson, B.H.Kropf	16h40-17h00	Meshless solution of the Burgers equation	P.Chinchapatnam, K.Djidjeli, P.Nair	16h40-17h00	Viscous Poiseuille flow with SPH and effects of boundary implementation	M.Basa, M.Lastiwka, N.Quinlan	CLOSURE		
17h00-17h20	Smoothed particle interpolation for electromagnetic simulations	G.Ala, E.Francomano, A.Tortorici, E.Toscano, F.Viola	17h00-17h20	Interpolating moving least squares for hyperbolic PDEs	W.Yomsatiengkul	17h00-17h20	Meshfree solution of boundary value problems via interpolating moving least squares and its application to Navier-Stokes	H.Netuzhylov			
17h20-17h40	Renormalised formulation of the SPH method: theory and applications	B.Ben Moussa, J.L.Lacome	17h20-17h40	Solving partial differential equations for plate bending problems using finite point method	M.Bitaraf, S.Mohammadi	17h20-17h40	Numerical analysis of peridynamic material with moving least square method	G.Ladanyi	Conference Dinner		
						20h00					