ICMSA 2009 Conference Timetable

1st Day : Tuesday, 9th June 2009

1	08:00 - 09:00	Opening Ceremony ICMSA 2009
2	09:00 - 10:30	Keynote / Invited Speaker's Presentation
	9	1. Prof. Masaji Watanabe
		2. Prof. Assoc. Prof. Dr. Pachitjanut Siripanitch
3	10:30 - 11:00	Break
4	11:00 - 12:00	Keynote / Invited Speaker's Presentation
, relati		1. Prof. Dr. R. K. Sembiring & Prof. Dr. Ahmad Fauzan
5	12:00 - 13:00	Lunch
6	13:00 - 15:15	Parallel Presentation Session 1
7	15:15 - 15:45	Break
8	15:45 - 17:30	Parallel Presentation Session 2
9	19:30 - 21:00	Invitation Dinner

^{2st} Day : Wenesday, 10th June 2009

1	08:00 - 09:00	Keynote / Invited Speaker's Presentation
		1. Prof. Katsuo Takano
		2. Prof. Rudy Setiono
2	09:00 - 10:30	Break
3	10:30 - 12:00	Keynote / Invited Speaker's Presentation
		3. Prof. Dr. Abdullah Embong
4	12:00 - 13:00	Lunch
5	13:00 - 15:15	Parallel Presentation Session 1
6	15:15 - 15:45	Break
7	15:45 - 17:30	Parallel Presentation Session 2
8	17:00 - 17:30	Closing Ceremony of ICMSA 2009

DETAILED PRESENTATION ON The 1ST DAY

1. June 9, 2009

Key Note Presentation

Time

: 09:00 - 10:30

Time	Title	Presenter	Chairperson
09:00 – 09:45	Modeling and Simulation for biodegradation processes of xenobiotic polymers	Prof. Masaji Watanabe	Dr. Saib Suwilo
09:45 – 10:30	Nonlinear optimization and its applications in data mining	Prof. Rudy Setiono	Dr. Hizir Sofyan

Key Note Presentation

Time

: 11:00 - 12:00

Time	Title	Presenter	Chairperson
11:00 – 12:00	A Movement in Mathematics Education in	Prof. Dr. R. K. Sembiring	Dr. Rahma Johar
	Indonesia	Prof. Dr. Ahmad Fauzan	

June 9, 2009

Parallel Presentation Class 4

Time

: 13:00 - 15:15

Code	Time	Title	Presenter
AM15	13:00 – 13:10	Fuzzy Conjoint Analysis Of Influence Factors In High-Rise Residential Price And Management Fund In Kuala Lumpur, Malaysia	Norngainy Mohd Tawil
CM1	13:10 – 13:20	Parallel Simulation of the Fourth-Order IADE Method on Heat-Equation With PVM	Ewedafe Simon Uzezi #
CM2	13:20 – 13:30	A Zero-dissipative Runge-Kutta-Nystrom with Minimal Phase-lag for Solving Oscillatory Problems	Norazak Senu ∗⁄
CM3	13:30 – 13:40	Numerical method for generalized Cauchy problem	Hossein Parsian
CM4	13:40 – 13:50	Implementation of Parallel Computational tools for the Curing Simulation of Thermoset Composites Using the Two Dimension AGE Algorithm	Amna Abdurrahman
CM5	13:50 – 14:00	A predictor-corrector regula falsi type for solving a nonlinear equation of a single variable	M. Imran
CM6	14:00 – 14:10	Numerical solutions for mixed convection boundary layer flow over a permeable horizontal flat plate with variable heat flux	Leli Deswita
CM7	14:10 – 14:20	An efficient parallel implementation of Markov clustering algorithm for large-scale protein-protein interaction networks that uses MPI	Alhadi Bustamam
CM8	14:20 – 14:30	Efficient Differential equation Solvers for Fluid modeling in Interactive Surgical Drilling Simulations based on GPU Computations	Sugeng Rianto
CM9	14:30 – 14:40	Generate The Matrix Form Of The Shallow Water Equations (Swe) Based On Grapichs Processing Units (Gpus), To Solve Tsunami Propagation Using Finite Element Method	Dewi Anggraeni
CM10	14:40 – 14:50	Developing secant method for solving nonlinear equations	Marlan
CM11	14:50 – 15:00	New Multi-step Runge-kutta method	O.Y Ababneh, Rokiah rozita ahmad
AM100	15:00 – 15:10	Game Theory	Sunil Kumar, Preetam G Hichkad

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This paper determines by simulation the temperature profiles of a thick thermoset composites during its curing process. The two-dimensional model of heat transfer is solved by using finite difference numerical schemes. In the process, the same physical and thermal properties of materials used by D.C. Blest et al. are employed. The temperature is calculated through a judicious formulation and application of the two dimension Alternating Group Explicit (AGE) iterative method. A fourth-order Runge Kutta method is applied for the cure. The AGE scheme proves to be a viable iterative method with respect to stability, efficiency and rate of convergence.

CM5 A predictor-corrector regula falsi type for solving a nonlinear equation of a single variable

M. Imran, Laboratorium Matematika Terapan, Jurusan Matematika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universiatas Riau, Pekanbaru Indonesia. e-mail: mimran@unri.ac.id

A modified regula falsi method, for solving a nonlinear equation of a single variable, based on applying another linear interpolation as corrector without any addition of function evaluations is presented in this paper. The method is known as predictor corrector method. The method has been tested in series of published examples. The numerical results show that the new method is very effective.

CM6 Numerical solutions for mixed convection boundary layer flow over a permeable horizontal flat plate with variable heat flux

Leli Deswita¹, Roslinda Nazar², Anuar Ishak² & Rokiah Ahmad², Fakultas Matematika & Ilmu Pengetahuan Alam (FMIPA) Universitas Riau-Indonesia, email: deswital@yahoo.com, School of Mathematical Sciences, Faculty of Science and Technology, Universiti Kebangsaan Malaysia 43600 UKM Bangi, Selangor, Malaysia

In this paper, numerical solutions are presented for the steady laminar mixed convection boundary layer flow over a permeable horizontal flat plate with variable heat flux. The similarity solutions are obtained for some values of the suction parameter f_0 , the constant exponent n as well as the mixed convection parameter λ . The resulting system of nonlinear ordinary differential equations is solved numerically for both assisting and opposing flow regimes using a finite-difference scheme known as the Keller-box method. Numerical results for the reduced skin friction coefficient, the wall temperature, the velocity and temperature profiles are obtained for various values of the parameters considered. Dual solutions are found to exist for the opposing flow.

CM7 An efficient parallel implementation of Markov clustering algorithm for large-scale protein-protein interaction networks that uses MPI

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