



## Gene Around The World

### ΠΡΟΣΚΛΗΣΗ

Ο Πρόεδρος της Διοικούσας Επιτροπής  
Καθηγητής Κωνσταντίνος Δημόπουλος  
και ο Πρόεδρος του Τμήματος Επιστήμης  
και Τεχνολογίας Υπολογιστών  
Καθηγητής Θεόδωρος Σίμος  
σας προσκαλούν στη Διημερίδα  
που θα πραγματοποιηθεί  
στις 29 Φεβρουαρίου και 1 Μαρτίου 2008  
στο Αποστολοπούλειο Πνευματικό Κέντρο  
του Δήμου Τρίπολης.

### INVITATION

The Chairman of the Administrative Committee,  
Professor Constantine Demopoulos  
and the Head of the Department  
of Computer Science and Technology,  
Professor Theodore Simo  
invite you to the two-day Conference  
which will be held on  
February 29th and March 1st, 2008  
at Apostolopouleio Cultural Center  
of Tripolis, Greece.



ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΛΟΠΟΝΝΗΣΟΥ  
UNIVERSITY OF PELLOPONNESE

<http://pelopas.uop.gr/~odykosm/>

## Gene Around The World



ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΛΟΠΟΝΝΗΣΟΥ  
ΣΧΟΛΗ ΘΕΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ  
ΤΜΗΜΑ ΕΠΙΣΤΗΜΗΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ ΥΠΟΛΟΓΙΣΤΩΝ

COMPUTER SCIENCE & TECHNOLOGY DEPARTMENT  
FACULTY OF SCIENCES AND TECHNOLOGY  
UNIVERSITY OF PELLOPONNESE  
TRIPOLIS, ARCADIA, GREECE

February 29th and March 1st, 2008

# Πρόγραμμα Διημερίδας / Program of the Conference

ΠΑΡΑΣΚΕΥΗ 29 ΦΕΒΡΟΥΑΡΙΟΥ FRIDAY 29TH FEBRUARY

12:30-13:15 Χαιρετισμοί / Welcome Speeches

- Από τον Πρόεδρο του Εμπορικού και Βιομηχανικού Επιμελητηρίου Αρκαδίας κ. Παυλί  
From the President of the Chamber of Industry and Commerce of Arcadia Mr. Pavlis
- Από το Δήμαρχο Τριπόλεως κ. Αλέξανδρο Κοτσιάνη  
From the Mayor of Tripolis Mr. Alexandros Kotsianis
- Από εκπρόσωπο της Νομαρχίας Αρκαδίας  
From a representative of Prefecture of Arcadia
- Από τον Καθηγητή Θεόδωρο Η. Σίμο  
From Professor Theodore E. Simos

13:15-14:00 Δεξίωση / Reception

## Έναρξη Διημερίδας / Beginning of the Conference

ΠΡΟΣΚΕΚΛΗΜΕΝΕΣ ΟΜΙΛΙΕΣ / INVITED LECTURES

### SESSION 1. Chairman: Professor Dr. T.E. Simos

- 14:00-14:40 Margarite Rizea, «Emission of scission neutrons by a time-dependent computational approach»
- 14:40-15:20 M. Gousidou–Koutita, T. J. Kalvouridis, «Application of Newton and Broyden methods for the investigation of the attracting regions in the Ring problem of  $N+1$  bodies: a comparative study»

### SESSION 2. Chairman: Dr. D.S. Vlachos

- 15:20-16:00 Slavoljub Mijovic, Mira Vuceljic and Theocharis Kosmas, «Inverse Problems in Experimental Physics»
- 16:00-16:40 Dimitrios Thomakos «Optimal Linear Filtering, Smoothing and Trend Extraction for Processes with a Unit Root»

16:40-17:00 Coffee Break

### SESSION 3. Chairman: Professor Dr. Ch. Tsitouras

- 17:00-17:30 Φοίβος Ξάνθος και Γεώργιος Παπαγεωργίου, «Μελέτη και Εφαρμογή Μεθόδων Runge-Kutta για την Αριθμητική Επίλυση Στοχαστικών Διαφορικών Εξισώσεων»  
Fivos Xanthos and George Papageorgiou, «Study and Application of the Runge-Kutta Methods for the Numerical Solution of Stochastic Differential Equations»

## Normal Contributions

- 17:30-17:50 Ioannis Th. Famelis, «On the Numerical Solution of Second Order Linear Differential Equations with oscillatory solutions»
- 17:50-18:10 Z. Kalogiratu, Th. Monovasilis, T. E. Simos, «Sixth order Trigonometrically and Exponentially Fitted Runge-Kutta-Nyström Methods with application to the Computation of the eigenvalues of the Schrödinger Equation»

### SESSION 4. Chairman: Dr. S. Skiadopoulos

- 18:10-18:30 G. Koutitas, «Comparison of Mathematical Techniques for Radio Wave Propagation Modeling»
- 18:30-18:50 Costas D. Koutras, «Many-Valued Modal Logic: Model Theory, Multiple-Expert Semantics and Non-Monotonic Extensions»
- 18:50-19:10 Spiros Skiadopoulos, «Cardinal Direction Relationships»

ΣΑΒΒΑΤΟ 1 ΜΑΡΤΙΟΥ SATURDAY 1ST MARCH

### SESSION 5. Chairman: Professor Dr. Ch. Tsitouras

- 09:30-09:50 Ch. G. Massouros and G. G. Massouros, «Operators and Hyperoperators Acting on Hypergroups»
- 09:50-10:10 F. N. Koumboulis and M. G. Skarpetis, «Matrix Inequalities in Uncertain Vector Spaces defined over the field of real numbers»
- 10:10-10:30 Vasilios N. Katsikis, «A new method for computing lattice-subspaces and vector sublattices of  $\mathfrak{H}^n$ »
- 10:30-10:50 Ch. Tsitouras, «Greatest Remainder Bi – proportional Rounding and the Greek Elections of 2007»

10:50-11:20 Coffee Break

### SESSION 6. Chairman: Professor Dr. T.E. Simos

- 11:20-11:40 D.S. Vlachos, «Density Function Techniques in Complex Networks»
- 11:40-12:00 Christos Christodouleas, Demetrios Xenides, T. E. Simos, «How does the bonding influence the behaviour of DFT methods in electric response properties calculations? The open and ring isomers of  $XO_2$  ( $X=O,S$ )»
- 12:00-12:20 Z. A. Anastassi and T. E. Simos, «A family of numerical methods for the efficient solution of the Schrödinger equation and related problems»
- 12:20-12:40 G. Panopoulos and T.E. Simos, Two Optimized Symmetric Eight-Step Methods for Initial-Value Problems with Oscillating Solutions

### SESSION 7. Chairman: Professor Dr. Andreas Maras

- 12:40-13:00 Alex P. Palamides & Andreas M. Maras, «Extended & Unscented Kalman filtering to combat inter-carrier interference in OFDM systems»
- 13:00-13:20 A. C. Boucouvalas, «A General Transmission Line Model of Maxwell's Equations In Cylindrical Co-ordinates»
- 13:20-13:40 Apostolos Gkamas, «Adaptive multimedia multicast over the Internet»
- 13:40-14:10 Μικρό Γεύμα / Short Lunch

### SESSION 8. Chairman: Dr. Demetrios Xenides

- 14:10-14:30 Dimitrios N. Gkrizapis, Elias E. Panagiotopoulos, «Exterior Ballistics»
- 14:30-14:50 O.T. Kosmas, D.S. Vlachos and T.E. Simos, «Discrete Lagrangian Techniques in Numerical Integration»
- 14:50-15:10 Jinyao Yan and Kostas Katrinis, «Equation-based Congestion Control: Sympathy for the Media»

### SESSION 9. Chairman: Dr. Costas Vassilakis

- 15:10-15:30 Nicholas Kolokotronis, «On Best Quadratic Approximations of Cubic Boolean Forms»
- 15:30-15:50 George Lepouras, «Numeric Input in Immersive Virtual Environments»
- 15:50-16:10 Dimitrios Kosmopoulos, «Human Behaviour Classification Using Multiple Cameras»

### SESSION 10. Chairman: Dr. George Lepouras

- 16:10-16:30 Costas Vassilakis, «Algebraic vs. Implementation-oriented Operations Design in Temporal Databases: Execution Efficiency and Optimization Issues»
- 16:30-16:50 Nikos Platis, «Multiresolution Visualization of Vector Fields»
- 16:50-17:10 A. J. Sakalis, «Multivariate statistical protocols as useful tools for data handling, derived by ancient ceramics micro X-ray fluorescence analysis»

## Poster Session

- Dejan Ilić and Vladimir Rakočević, «Common fixed points for maps on cone metric space and on metric space with w-distance»
- Zoran Stanić, «On Q–integral Graphs»