



Palestinian Conference on Modern Trends in Mathematics and Physics

July 28 - 30, 2008

Conference Schedule

Day 1: Monday July 28, 2008

8:30 - 9:00 *REGISTRATION, Aziz Shaheen Building, ARTS 150*

9:00 - 10:00 *OPENING SESSION, Aziz Shaheen Building, ARTS 150*

10:00 - 11:10 *SESSION 1, Aziz Shaheen Building, ARTS 150*

Chair: Saber Elaydi

10:00 - 10:40 Jim Cushing : "Population Dynamics: A Bifurcation Theory Approach".

10:40 - 11:10 Alberto Pinto: "Patents in new technologies".

11:10 – 11:40 *COFFEE BREAK*

11:40 - 13:10 *SESSION 2, Aziz Shaheen Building, ARTS 150*

Chair: Malgosia Guzowska

11:40 - 12:10 Henrique Oliveira : "Synchronization of Andronov clocks".

12:10 - 12:40 Hüseyin Koçak : "Degenerate Tori as Transport Barriers".

12:40 - 12:55 Luis Vieira : "Difference equations and the spectra of a family of strongly regular graphs".

12:55 - 13:10 Rui Gonçaves : "Universal fluctuations of the Wolf's sunspot numbers".

13:10 - 15:00 *LUNCH BREAK*

15:00 - 16:30 **SESSION 3A, Aziz Shaheen Building, ARTS 150**

Chair: Ibrahim Almasri

15:00 - 15:15 Fathi Allan : "Multidimensional Shooting Method for Nonlinear Boundary Value Problems".

15:15 - 15:30 Mohamad Jarrar : "Commutative Rings In Which Every Finitely Generated Ideal Is A *-Module".

15:30 - 15:45 Taha Abu-Kaff : "Oscillation of Solutions of Arbitrary Neutral Differential Equations".

15:45 - 16:00 Kamal Darwesh : "Efficient Elliptic Scalar Multiplication by Combining Multidoubling with Mixed Coordinates".

16:00 - 16:15 Khalidah Nazzal : "Steinhaus graphs Generated by e_j ".

16:15 - 16:30 Ala'a Badawi: "Conformal Mappings with Applications to Computational Geometry".

15:00 - 16:30 **SESSION 3B, Aziz Shaheen Building, ARTS 162**

Chair: Aziz Shawabkeh

15:00 - 15:15 Adli Saleh : "Hydrogen Uptake by Ti Ultrathin Films on Al Surfaces".

15:15 - 15:30 Imad Barghouthi : "Monte Carlo simulation of ionospheric Boltzmann equation".

15:30 - 15:45 Wael I. Karain : "Detection of protein conformation transitions using Recurrence Quantification Analysis".

15:45 - 16:00 Raed Hasan : "Magnetic quantum oscillations of the longitudinal conductivity in quasi-two-dimensional metals".

16:00 - 16:15 Mohamed Abu Samreh : "Electrical Properties OF $Co_{2-x}Zn_xBa_2Fe_{28}O_{46}$ Hexagonal Ferrite".

16:30 – 17:00 **COFFEE BREAK**

17:00 - 18:30 **SESSION 4, Aziz Shaheen Building, ARTS 150**

Chair: Mohammad Saleh

17:00 - 17:30 Daoud Bshouty : "Harmonic Mappings In The Plane: Harmonicity Versus Analyticity".

17:30 - 18:00 Lance L. Littlejohn : "Left-Definite Operator Theory".

18:00 - 18:30 Gerry Ladas : "Open Problems and Conjectures in Difference Equations".

Day 2: Tuesday July 29, 2008

8:30 - 9:00 **REGISTRATION**, *Aziz Shaheen Building, ARTS 150*

9:00 - 10:40 **SESSION 5**, *Aziz Shaheen Building, ARTS 150*

Chair: Annick Suzor-Weiner

9:00 - 9:40 Michael Berry : "Tsunami asymptotics".

9:40 - 10:10 Yousef Salamin : "Laser Acceleration of Bare Nuclei for Cancer Therapy".

10:10 - 10:40 Jacques Miltat : "Spin Transfer and Micromagnetics".

10:40 - 11:10 **COFFEE BREAK**

11:10 - 12:40 **SESSION 6**, *Aziz Shaheen Building, ARTS 150*

Chair: Ulrich Eckern

11:10 - 11:40 Roberto Raimondi : "Physical Conditions for the Spin Hall Effect".

11:40 - 12:10 John Weiner : "Light-Matter Interaction at the Nanoscale".

12:10 - 12:40 Peter Coveney : "Novel Computational Methods for Turbulence".

12:40 - 14:00 **LUNCH BREAK**

14:00 - 16:30 **GENERAL DISCUSSION**: Turning the idea of a Palestinian Center of Excellence in Mathematics and Physics at Birzeit University into a reality.

16:30 - 17:00 **COFFEE BREAK**

17:00 - 18:30 **SESSION 7**, *Aziz Shaheen Building, ARTS 150*

Chair: Michael Berry

17:00 - 17:30 Ferdinand Evers : "Ab Initio Transport Calculations for Molecular Electronics: Fundamentals and Applications".

17:30 - 18:00 Sami M. AL-Jaber : "Degenerate electron gas and star stabilization in D dimension".

Day 3: Wednesday July 30, 2008

9:00 - 10:40 **SESSION 8, Aziz Shaheen Building, ARTS 150**

Chair: Gerry Ladas

9:00 - 9:30 Edriss Titi : "On the Question of Global Regularity for Certain Three-Dimensional Fluid Models".

9:30 - 10:00 Federico Lastaria : "Exterior Derivative of Forms and Infinitesimal Stokes' Theorem".

10:00 - 10:30 Mary W. Gray : "Statistics In Aid Of Human Rights".

10:30 - 11:00 **COFFEE BREAK**

11:00 - 12:30 **SESSION 9A, Aziz Shaheen Building, ARTS 150**

Chair: Mohammad Saleh

11:00 - 11:15 Abd-el-Razaq Alawneh : "Dynamics of the Rational Difference Equation".

11:15 - 11:30 Monjed Samuh : "The Effectiveness of Multistage Ranked Set Sampling in Stratifying the Population".

11:30 - 11:45 Yasser Awad : "Complex Burgers Equation- A paradigm for rotation prevents break-down of solutions".

11:45 - 12:00 Y. Zahaykah : "Evolution Galerkin Methods for Multidimensional Hyperbolic Systems".

12:00 - 12:15 Thierry Coulbois : "Symbolic Dynamic And Interval Exchange".

11:00 - 12:30 **SESSION 9B, Aziz Shaheen Building, ARTS 162**

Chair: Sami Al-Jaber

11:00 - 11:15 Waseem Al-Hausani : "Convergence of Conformational Sampling for Bovine Pancreatic Trypsin Inhibitor in a 30ns Molecular Dynamics Simulation".

11:15 - 11:30 Farah Saleh : "Ga_{1-x}Mn_xN: First-principle study of cubic alloys".

11:30 - 11:45 Jamal Suleiman : "Theoretical Transition Probabilities for inner-shell single and double electron excitations in sodium".

11:45 - 12:00 Mohamed Abu Samreh : "Friedel Oscillations in a Three-Dimensional Noninteracting Electron Gas".

12:00 - 12:15 Omar Isleem : "BeO compound under high pressure".

12:30 - 14:00 **LUNCH BREAK**

mm14:00 - 15:00 **SESSION 10, Aziz Shaheen Building, ARTS 150**

Chair: Olivier Pene

14:00 - 14:30 Saber Elaydi: "Attenuance versus Resonance in dynamical systems".

14:00 - 15:00 Adi Nusser : "Beyond the standard cosmological model".

15:00 - 17:00 **General Meetings of the Palestinian Physical Society and the Palestinian Mathematical Society**