

# RECREATIONAL MATHEMATICS COLLOQUIUM I April 29th - May 2nd 2009

Recreational Mathematics Colloquium I Departamento de Matemática. Universidade de Évora Rua Romão Ramalho. 59. 7000-671 Évora Tel: 93 846 2325 ou 96 541 1196 Fax: 266 745 393 University of Évora

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# PROGRAM

# Wednesday, 29th April

- 8:30 Welcome and registration
- 9:00 Opening Session
- 9:30 Rick's Tricky Six Puzzle Richard Guy, University of Calgary
- **10:15 Archimedes's Stomachion** Henrique Leitão, University of Lisbon

# 10:45 - Coffee-Break

- **11:15 Winning Ways for Mathematically Losing Plays** Jorge Buescu, University of Lisbon
- **11:45 Games on Power Networks Dispatch: The World as a Case Study** José Carlos Quadrado, ISEL
- **12:15 The Generalisation Squared of Domino** Cosimo Cardellicchio
- 12:45 Break for lunch
- **14:15 Math and Films** Michele Emmer, University of Rome
- **15:00 Strong Connections Between Chess and Maths** Alda Carvalho, ISEL Carlos Santos, ISEC

# 15:30 - Coffee-Break

- **16:00 Piet Hein, a Brilliant Mind** Natália Bebiano, University of Coimbra F. J. Craveiro de Carvalho, University of Coimbra
- **16:30 The Importance of Play** António Machiavelo, University of Porto
- 17:00 Lozenge Tillings of Polygons Ana Paula Cláudio, University of Lisbon Ilda Perez, University of Lisbon N. Pinto, University of Lisbon N. Prelhaz, University of Lisbon J. Soares, University of Lisbon

#### 18:00 - Welcome Cocktail

# Thursday, 30th April

- 9:30 Multiple Pile Take-Away Games Aviezri Fraenkel, Weizmann Institute of Science
- 10:15 Descartes's Pedagogical Deck Marisa Ferreira, University of Lisbon Jorge Nuno Silva, University of Lisbon

#### 10:45 - Coffee-Break

- **11:15 Sangaku** Antonieta Constantino, Esc.Sec.Miraflores
- **11:45 The Rainbow Game** Helena Sousa Melo, University of Azores Ricardo Cunha Teixeira, University of Azores
- **12:15 Art Through Functions** Maria da Graça Marques, University of Algarve Marília Pires, University of Algarve
- 12:45 Break for lunch
- 14:00 Visit to Monsaraz

# Friday, 1st May

- 9:30 Exploring the Fourth Dimension: "Flatland: the Movie" and the Geometric Art of Salvador Dali Thomas Banchoff, Brown University
- **10:15 Polyhedron Puzzles: Combinatorics and Groups** Jorge Rezende, University of Lisbon

### 10:45 - Coffee-Break

- 11:15 Mathematical Games for the Blind Carlota Dias, University of Lisbon Jorge Nuno Silva, University of Lisbon Pedro Palhares, University of Minho
- **11:45 Card Tricks: Math vs Magic** Carlos Santos, ISEC Jorge Nuno Silva, University of Lisbon
- 12:15 "Zéfiro Explorador" a Game Designed for Children Focusing Math Skills Training Cristiana Vidal Accioly, University of Coimbra Silvia Barbeiro, University of Coimbra Aderito Araujo, , University of Coimbra Maria João Santos, University of Coimbra Michael Diniz, University of Coimbra
- 12:45 Break for lunch

# 14:15 - Gardening and Lawns and Mazes

Richard Nowakowski, Dalhousie University

# 15:00 - Stamping Patterns

Arala Chaves, University of Oporto

### 15:30 - Coffee-Break

- **16:00 Some Medieval Problems** Eurico Nogueira, New University of Lisbon
- **16:30 A Solitary Pebble Game** Pedro Duarte, University of Lisbon
- **17:00 A Very Mathematical Card Trick** Carlos Santos, ISEC Jorge Nuno Silva, University of Lisbon Pedro Duarte, University of Lisbon
- 20:00 Conference Dinner

# Saturday, 2nd May

- 9:30 In Tribute to Martin Gardner David Wolfe, Gustavus Adolphus College
- 10:15 Discover the Symmetries: an Interdiciplinary Project for the First Grade Andreia Hall, University of Aveiro Carlota Simões, University of Coimbra Constança Providência, University of Coimbra

### 10:45 - Coffee-Break

- **11:15 Solving Mathematical Puzzles on Saturday Afternoons** Ana Maria de Almeida, University of Coimbra
- **11:45 Recreational Mathematics within the cassroom: a Portuguese case-study** Sandra Figo, EB23 Marquês de Pombal Ana Maria de Almeida, University of Coimbra
- **12:15 Metromachia An Ancient Pedagogical Game** Isabel Catarino, ES Pinhal Novo

# 12:45 - Break for lunch

- 14:15 Mathematical Skills and Mathematical Games Dores Ferreira, University of Minho Jorge Nuno Silva, University of Lisbon Pedro Palhares, University of Minho
- **15:00 Origami's Geometry** Liliana Monteiro, EB 2,3 D. António de Ataíde
- 15:30 Closing Session