



Ludus



Recreational Mathematics
Colloquium III

Board Game Studies
Colloquium XVI

BOOK OF ABSTRACTS

University of Azores
April 3rd - April 6th, 2013



Recreational Mathematics

Colloquium

April 3rd – April 6th 2013
University of Azores, Ponta Delgada

BOARD
GAME
STUDIES

Colloquium XVI

Organization:

Ludus Association
University of Azores

Organizing Committee:

Alda Carvalho (ISEL, Portugal)
Ana Paula Garrão (University of Azores, Portugal)
Carlos Santos (ISEC, Portugal)
Jorge Nuno Silva (University of Lisbon, Portugal)
Margarida Dias (University of Azores, Portugal)
Ricardo Cunha Teixeira (University of Azores, Portugal)

Scientific Committees:

Recreational Mathematics

Alda Carvalho, Portugal
Carlos Pereira dos Santos, Portugal
Colin Wright, UK
David Singmaster, UK
Ilda Perez, Portugal
João Pedro Neto, Portugal
Jorge Nuno Silva, Portugal
Ricardo Cunha Teixeira, Portugal
Richard Nowakowski, Canada
Robin Wilson, UK

Board Game Studies

Alex de Voogt, USA
Edite Alberto, Portugal
Fernanda Frazão, Portugal
Irving Finkel, UK
Jorge Nuno Silva, Portugal
Lídia Fernandes, Portugal
Thierry Depaulis, France
Ulrich Shädler, Switzerland

Sponsors:



- 15:30 **Problem solving through crafts and challenges**
Stephanie Cabral, University of Azores
- 16:00 Coffee-Break
- 16:30 **Treason strategies**
João Cabral, University of Azores
- 17:00 **Jogo do paralelo**
Raquel Faria, University of Azores
- 17:30 **Can mathematical exhibitions be recreational?**
José Francisco Rodrigues, University of Lisbon
- 18:00 **Contest “Um conto que contas”**
Helena Melo, University of Azores & CMATI
- 18:30 **Interesting Announcements (RM+BGS)**
Jorge Nuno Silva, Carlos Santos, Ludus Association
- 19:30 Conference Dinner

Saturday, 6th April, amphitheatre C

- 9:30 **Game profiling (RM+BGS)**
Richard Nowakowski, Dalhaousie University
- 10:30 **Why “Zermelo’s Theorem” is called “Zermelo’s Theorem” ? (RM+BGS)**
Lisa Rougetet, University of Science and Technology of Lille
- 11:00 Coffee-Break
- 11:30 **Vanishing area puzzles (RM+BGS)**
David Singmaster, Retired professor of London South Bank University
- 12:30 **Lasker and mathematics (RM+BGS)**
Jurgen Stigter, TWA
- 13:00 Break for lunch
- 14:30 **Turning the lights out on graphs**
António Machiavelo, University of Oporto
- 15:30 **Combinatorial games and computability**
Urban Larsson, Chalmers, University of Gothenburg

blue. In each move a player places a cube on the board, in contact with the existing cubes on the board, with at least two of its faces in correspondence (except the first move), and a maximum of five faces in contact. The game ends when one of the players can not place a cube on the board, the winner being the last player to play. Since it is a game in three dimensions, it admits several levels, but in this first version the cubes are all placed over the board. Some winning strategies will be explored.

Contest “Um conto que contas” (RM)

HELENA MELO, University of Azores & CMATI

SANDRA VINAGRE, University of Evora & CIMA/UE

The contest “Um conto que contas” (“A tale that accounts”) is open to all students of public and private schools of all country, from the first level of first cycle to the last level of secondary. The competition consists of writing and illustrating a tale involving mathematical contents. One of the goals is to promote habits of reading and writing in students and to promote coordination between various disciplines, stimulating the imagination. Participants can compete in one of eight categories, according to their level of education, in individual modality or in team, with a maximum of four elements. In the evaluation of tales, mathematical contents, the domain of language, originality, creativity, logical narrative, among others, will be valued.

Treason Game Strategies (RM)

JOÃO CABRAL, University of Azores

The Treason Game had its debut in the Recreational Mathematics Colloquium II, and now it is played in High Schools by students. But it is always a game in continuous evolution due to its richness in strategies and direct application to the teaching of isometries in Schools. We present the study, exploration and discussion of some of the strategies used by players of this game as well their connection with isometries.

Ancient Egyptian board games: an historical account (RM+BGS)

JOAQUIM EURICO NOGUEIRA, CELC & FCT-UNL

In this talk I will examine in detail some historical and religious aspects of the most important games (Senet, Mehen, 58 holes, Tjau and Seega) that were in vogue in the kingdom of pyramids in the millennia before Christ. The first four (Senet, Mehen, 58 holes, Tjau) were racing games, with the chance factor influencing the movement of the pieces and where several squares of the boardgame are trapped; the last one (Seega) is a strategy game, possibly an ancestor of Petteia and Latrunculi.