



MATHEMATICS AND LITERATURE III IN FOLIO 2018

AN INTERNATIONAL WORKSHOP HELD IN ÓBIDOS, PORTUGAL
29TH–30TH SEPTEMBER

by **António Machiavelo***

The *International Center for Mathematics* (www.cim.pt), in partnership with the *Science Museum of the University of Coimbra* (www.museudaciencia.org) and the *Portuguese Mathematical Society* (www.spm.pt), organized the *Mathematics and Literature III*, a two-day international workshop on Literature and Mathematics, with the support of the *Center for Mathematics, Fundamental Applications and Operational Research of the University of Lisbon* (cmafcio.campus.

ciencias.ulisboa.pt), and the *FCT Doctoral Program in Materialities of Literature of the Faculty of Arts and Humanities of the University of Coimbra* (www.apps.uc.pt/courses/en/course/2341). This initiative took place at the Municipal Museum, on the occasion of the FOLIO 2018 — *Óbidos Literary International Festival* (www.foliofestival.com), organised and hosted by the medieval town of Óbidos (www.obidos.pt).

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António Machiavelo



José Francisco Rodrigues



Robin Wilson



Angelo Guerraggio



Krzysztof Ciesielski

The workshop consisted of four presentations in English, on the first day, and four talks in Portuguese and a bilingual one in French and Portuguese, on the second day. The talks covered significant aspects of some interconnections between Mathematics and Literature.

The first talk, a joint presentation by António Machiavelo (University of Porto) and José Francisco Rodrigues (University of Lisbon), brought up *some unexpected interactions between Mathematics and Literature*, ranging from Luís de Camões and Pedro Nunes, Sylvester and his *Laws of Verse or Principles of Versification*, Joaquim Namorado and António Aniceto Monteiro, to Bourbaki and Oulipo, and ending with a challenge to the audience to create long words in Portuguese, or any other language, with no repeated letters.

Robin Wilson (Open University, UK) presented *the fantastical mathematical logical life of Lewis Carroll in Numberland*, describing the mathematical and literary lives of Charles Dodgson in the context of Victorian Oxford, his writings for children and adults, his passion for photography and Euclid, his witty word play. Angelo Guerraggio (Università Bocconi, Milano) talked about the fascinating Leonardo Sinisgalli (1908–1981), a poet with a mathematical background, and a key figure at the *crossroads* of literature, mathematics and industrial culture in Italy in the middle 20th century. Krzysztof Ciesielski (Jagiellonian University, Krakow, Poland) offered several glimpses of *elements of mathematics in some science-fiction novels and stories* of Stanisław Lem (1921–2006), Januz A. Zajdel (1938–1985), as well as John Boyd, Robert Heinlein, Rudy Rucker and Alexander Zytinski.



Nuno Camarneiro



Joana Gomes



Flávio Coelho



Cristina Cordeiro and Carlota Simões



Manuel Portela and Ana Silva

On the second day, Nuno Camarneiro (Leya prize recipient in 2012, presently at the Catholic University of Porto) opened the session with some thoughts on *the fiction of time*, providing some literary and some scientific views of the elusive concept of time. Joana Gomes (University of Porto), in *The Waltz of exactness: the Vienna Circle and the Concert of Mathematics, Philosophy, and Literature in the Interwar Period*, described the principles defended by the Vienna Circle, their interaction with the political and social backgrounds of this period, and their influence in the arts and literature, pointing out the influence of some mathematicians and of Mathematics in that circle. Flávio Coelho (University of São Paulo, Brazil) offered a glimpse of *two faces of the same coin: Literature and Mathematics* from the perspective of his dual life, as a writer and as a mathematician.

Cristina Robalo Cordeiro and Carlota Simões, both from the University of Coimbra, presented, in a humorous and delightful duet, the *Mémoire concernant le calcul numérique de Dieu par des méthodes simples & fausses*, a text of Boris Vian, full of wit and satire, mixing mathematics, literature and religion. Finally, Ana Marques da Silva and Manuel Portela, both from the University of Coimbra, acted to offer the participants a performance from some of their experiences mixing Literature with Cybernetics.

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