



## EUROPEAN SOCIETY FOR MATHEMATICS AND ART NEWSLETTER

Volume 002. Issue 09

September 2011

FOREWORDS    ACTIVITIES    RESOURCE UPDATE    GALLERY

Dear Colleagues,

Among the arts, the literary art has an important place in our society which ESMA cannot ignore. How is literary art is linked to mathematics? We can get a glimpse of an answer in the works of a few French writers reported and analyzed by Michael P. Saclolo in his paper 'How a Medieval Troubadour Became a Mathematical Figure' (Notices of the AMS, May 2011, 58, 5, 682-687). From the mathematical point of view, these poetic works are analyzed using structural and formal tool. The rhythmic part is important in these works and is itself linked to the music of the language.

Each language has its own richness, mirroring an original way of feeling, thinking and looking at the world. To destroy a language is to impoverish human thinking.

From this point of view, all of the European languages should be saved.

Of course, the need for communication among us imposes the use of a common denominator. Such a denominator among a community at a certain time has always been the language of the most influential leaders during that epoch. Akkadian, Greek, Latin were some of the dominant languages in Ancient times. Later, French became an international language, now supplanted by English.

For how long, we do not know. Completely supplanted ? That is not quite sure. Any true writer, who describes not only the acts of men but also all the aspects of nature, is very sensitive to all the qualities of a language: it is a significant fact that many writers whose native language is not French, chose that language to express their thoughts. Look for instance in Wikipedia for "**Francophone literature**". It is not only because they were living in France for some particular and personal reasons that Samuel Beckett (Irish), Jorge Semprun (Spanish) or François Cheng (Chinese, member of the Académie Française) wrote their main works in French. This language has intrinsically enchanting beauty. You can express delicacy, strength, or firmness, vibrating from all their colours and their nuances, melodious, tuneful, musical, rhythmical, singing, clear, precise or shining,

*Le cristal de neige sur leur façade  
Brise en vibrations chromatiques  
Les rayons de lumière parfaite  
Qu'irise le diamant prismatique*

*Les sapins aristocratiques  
Ont revêtu leurs manteaux blancs  
Les sapins aristocratiques  
Scintillent sous le soleil blanc...*

### CONTENTS

FOREWORDS	P. 1
ACTIVITIES	P. 2
RESOURCE UPDATE	P. 3
GALLERY	P. 3
TECHNOLOGY	P. 4



*You may not understand these lines, but you may be attracted to their musicality. This last point has not been taken into account by the mathematical studies reported by Michael Saclolo, which means a lot of work for the future.*

*Until now, I have been the writer of this Newsletter. But any other ESMA member can be a contributing author. It would enliven and enrich our culture to have a few words from other languages introduced in the authors' texts.*

*With my best wishes,*

*Claude P. Bruter*

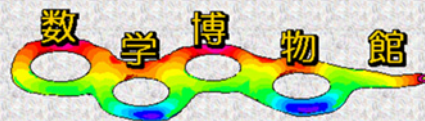
*P.S.*

*I would like to gratefully thank Jean Constant who, in the past, accepted the task of improving my texts from the linguistic point of view. I am also grateful to a friend, Sharon Breit-Giraud, for continuing that delicate job.*

*Two days after the writing of this letter, I received the September issue of "Pour la Science", the French edition of the Scientific American. In that issue one can read an article by linguists involved in trying to give a scientific status to the obvious fact that "language shapes thought".*

## ANNOUNCEMENT

### Mathematics Museum (Japan)



You can enter exhibition rooms from the lobby here.

**Professor Tohsuke Urabe** passed away at Yarigatake mountains on May 1st, 2011. Being an expert in algebraic geometry, he submitted a 177-pages preprint last year, and was looking forward to present his results this September at a conference in Spain celebrating Heisuke Hironaka's 80th birthday.

Professor Urabe was quick and eager to utilize the Web technology in mathematics education and outreach programs. He hosted and organized an international **Mathematics Museum** within his **lab-pages**. Several ESMA members, Richard Palais, George Hart, Jean Constant and other are featured in it. In commemoration of his effort, his colleagues at Ikabari University will keep the site open and preserve the data as they were on the day of the accident.

**September 15, 2011. International Science & Engineering Visualization Challenge.** The National Science Foundation.

**September 27, 2005.** The **Dam Digital Art Award** established in 2005, honors the most important artists in the area of digital art for their life's work or for an important group of works. The award ceremony will take place on September 27, 2005 at the Philharmonie in Essen during the DMS Expo. The prize is endowed with 20,000 Euros.

**December 31, 2011. Nexus 2012 Logo Competition** for the 2012 Nexus conference on architecture and mathematics. A selection of the best entries will be exhibited during the Nexus 2012 conference.

**ESMA member Herve Lehning** released recently a - "Maths for everyone" book called: "Question de maths sympa" (in French only). Available at [Amazon.com](http://Amazon.com)

## ACTIVITIES

**On-Going: Palais de la Decouverte.** Paris, FR. Patrice Jeener explores mathematics. Exhibition of prints in the space dedicated to Mathematics.

"**The ESMA Summer/Winter School** committee met in Coimbra during the Bridges conference. ESMA members and interested parties are invited to submit an abstract and short syllabus for lecture, workshop or lab activity relating to a math or a mathematical-art topic to **Slavic Jablan**. Depending on funding calendar deadline, the 1 week -10 days workshop will take place summer of 2012 or 2013 and will be open to undergraduate students regardless of country of origin".

## RESOURCE CENTER

Posted this month on the ESMA website, resource center page. For suggestion, recommendation, comment on new posts: [info@mathart.eu](mailto:info@mathart.eu)

- **Polthier Konrad.** *Mathematik und Kunst.* Mitteilungen der DMV. 6-2010 ([Resource](#), [Mathematics and Art](#))
- **KOSLOV Dmitri.** *Knots and links as form generating structures.* ESMA 2010 conference presentation EN ([Resource](#), [Mathematics](#))
- **ANDREATTA, Moreno.** *Mathematica est exercitium musicae.* Mathematical research & its interaction with other disciplines. CNRS-IRCAM 2010. FR

## GALLERY



3D anamorphosis. 40cmx40cm\*20cm. Wood and plastic.

...3D anamorphosis · This work is an attempt to answer the question a British sculptor, James Hopkins asked me : "Is it possible to design a 3D object that will reveal an hidden design when seen in a mirror ?" The answer is yes, and I begun to develop a method for constructing such installations... Francesco De Comite is Assistant Professor of Computer Science at the University of Sciences and Technology of Lille France.

Exhibited at the **2011 Bridges MathArt conference, Coimbra PO.**

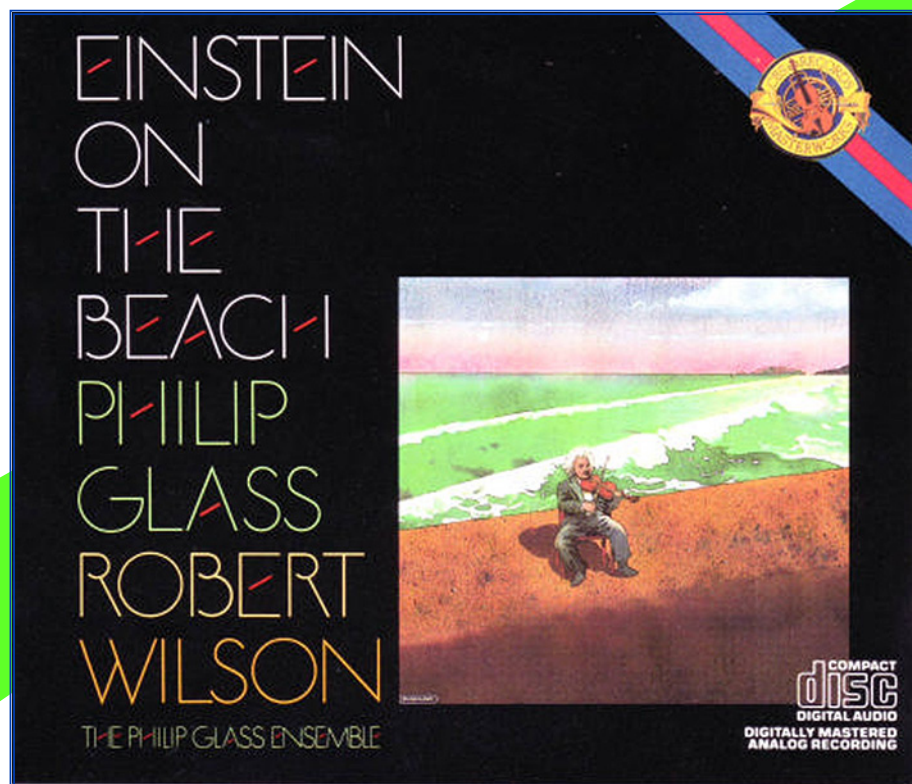
**OF INTEREST**



**How Khan Academy Is Changing the Rules of Education.**

The Khan Academy is a not-for-profit educational organization created in 2006 by MIT graduate educator Salman Khan. With the stated mission of "providing a high quality education to anyone, anywhere", the website supplies a free online collection of more than 2,400 micro lectures via video tutorials covering calculus, algebra, arithmetic, physics among many subjects and is watched by over 1 million users every month. Clive Thomson's article on Khan academy is available in last month **Wired** magazine.

**What do scientists (and artists) do in the summer?**



*Einstein on the Beach* is an opera that premiered at the Avignon Festival in France IN 1976. It was scored and written by Philip Glass, designed and directed by theatrical producer Robert Wilson. It also contains writings by Christopher Knowles, Samuel M. Johnson and Lucinda Childs. *Einstein on the Beach* is described by Glass as an "Opera in four acts for ensemble, chorus and soloists". The new version will be presented at the Opera Berlioz in Montpellier, France in March 2012

