



Volume OO2. Issue 05

May 2011

FOREWORDS ACTIVITIES RESOURCE UPDATE GALLERY

Dear Colleagues,

May I remind you that the ESMA membership includes an insurance that covers accident and theft while traveling on ESMA business. An office is also available for our members at the Poincare Institute in Paris. The hours are 9:00 AM -6:00 PM Monday to Friday. Contact any of the executive committee to get door, Internet and phone access codes. Make sure your membership is current.

The IHP also hosts in its basement the ARPAM and ESMA archives that are open to all members and include correspondence and all other related material of the Society prior to and since its creation.

The following should be read as an appeal for better collaboration between mathematics and scientific disciplines concerned about esthetic and elements of beauty in the pursuit of their activities.

The challenging relationship between math and other sciences may be partly due to an original misunderstanding of the nature of Mathematics. Mathematics evolve from the observation of the physical world codified into a symbolic language It may be compared to some form of abstract physics, developing in part by itself. In their reasoning, mathematicians often use the term logic, which is a rather obscure concept, instead of formal causality. Initially, formal causality is the representation of an original physical causality in a symbolic language. In the physical reality, one cannot divide three apples between two persons so that each can have an entire apple. The fact that a prime number cannot be divided by any even integer is indeed a physical fact that creates a formal causality. From its origin, the effectiveness of mathematics in behavioral analysis and predictions is based on formal causalities because its reflects on more or less immediate and stable physical causalities

FOREWORDS P. 1 ACTIVITIES P. 2 RESOURCE UPDATE P. 3 GALLERY P. 3 TECHNOLOGY P. 4 It goes without saying that most other sciences do include mathematics at one level or the other. That in some places, people responsible for the relation between Science and Art still exclude math in their undertaking appears as irresponsible behavior founded more on psychological considerations than sound objective analysis. Such a negative attitude is detrimental to the Society, the Institution they represent and the Public at Large. Continued from Page 1



In the past, scientific institutions, such as the Futuroscope in Poitiers and the French National Institute of Health and Medical Research (INSERM) have contacted us to borrow some of our collection artworks for public display.



The Penrose image incorporated in this video narrated by biologist Jean Claude Ameisen and featured on the April, 20101 issue of Univer-Science TV is just one the latest example of the many positive aspects of such collaboration.

The work of local and European institutions such as these is significant as it reflects on the professionalism and dynamism of the Institution they represent.

ESMA hopes we will continue working inclusively with every other scientific discipline to promote and disseminate all aspects of Science.

With my best wishes,

Claude P. Bruter

ANNOUNCEMENT

May 16, 2011. 10:30 am. IHP, Paris. Slavik Jablan. (Mathematical Institute of Belgrade.) Lecture on "Symmetry and Beauty of Knots".

June 22, 2011. Princes Teaching Institute London UK. Royal Institute of British Architects. Maths & Art A day devoted to Mathematics and Art, focussing on exploring the ways in which Art can not only enhance and engage students in the pursuit of Mathematics, but also how Art has been used throughout history to convey mathematical meaning and support mathematical thinking.

THROUGH JULY 31. LOS ALAMOS, NM USA - LACDC Science and Math-based Art Competition. \$3000 in cash prizes. Winning submissions may have their art placed on public display in the new Los Alamos Creative District as part of LA's new Outdoor Science and Math Art walk. Participate or **vote** for your local ESMA member!

Casselman, Austin & Wright on **UniverScience TV**, issue # 70. 2 minute video. Narration Jean Claude Ameisen.

ACTIVITIES



June 1 - September 4, 2011. "Mathematics and Art". ESMA exhibition, in collaboration with IRCAM. Palais de la Decouverte. Paris. FR.

June 7 - July 23, 2011. "Mathematics and Art" ESMA exhibition. Maison des Arts. Aime. FR

On-Going

- **IMAGINARY** exhibitions in Spain (2011 and 2012) Organized and coordinated by the Royal Spanish Society of Mathematics. (RSME).

ESMA is now on the LIMSI LISTSERV. (The CNRS Computer Sciences Laboratory for Mechanics and Engineering Sciences)

RESOURCE CENTER

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

- **DE COMITE**, **Francesco**. A new kind of 3D Anamorphosis. EN (Resource, Mathematics and Art)
- HUYLEBROUCK, D: Lost in Triangulation: Leonardo Mathematical slipup. EN (Resource, Mathematics and Art)

GALLERY

Defining randomness

rtist Richter's 4900 A colors (2007) is composed of 196 panels, each of which consists of 25 squares arranged in 11 core configurations (each using all 196 panels), ranging from multiple smaller grid combinations of various sizes to just one largescale work. The order of the colored squares was based on chance, having been generated randomly by a computer program. The 11 configurations were selected by Gehrard Richter and there is no hierarchy among them.



David Spiegelhalter used examples of Richter-like displays using 9 colors chosen at random within each square of a 9 x 9 grid. There are often apparent clusters and patterns in the colors. Can you spot the fake piece of random art?







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