



## EUROPEAN SOCIETY FOR MATHEMATICS AND ART NEWSLETTER

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Dear Colleagues,

*ESMA was involved in two momentous events last month: one at The Maison des Arts in Aime, a small and vibrant community of the Tarentaise valley in the heart of one of Europe largest ski region, another one at the Palais de La Decouverte in Paris, France.*

*A detailed report on the Aime exhibit will be published in the Gazette des Mathematicians in the near future. Local schools were invited to attend talks offered by some of the exhibiting artists who were in town for the opening. Patrice Jeener gave a presentation on mathematical etching to a 7th graders class. Two classes of junior and senior high -schoolers attended Jos Leys talk on mathematical images. Interestingly, the instructors requested that Jos' presentation be given in English to one of the classes. After a constructive meeting, the students were handed a short survey that should be returned to us in shortly. The teachers inquired about the possibilities of repeating the exhibit and lecture format next year. This is quite significant as they will be our best ambassadors to promote such event and engage the public in the mathematics and art dialogue. It also encourages ESMA to continue scheduling presentations and talks along with exhibits, as we will do for the upcoming exhibit in Paris in February. After the opening reception, The Maison des Arts invited me to give a talk on the connection between mathematics and art, which I did based on an in-depth PowePoint review of the exhibitors' work. More writing on this subject may be expected soon. The talk was well attended and generated a lot of stimulating audience interaction.*

*IRCAM\* (Institute for Research and Coordination of Acoustics and Music) invited ESMA to participate to an exhibit and a public round-table during the 3rd Agora Festival held in Paris June 12-18. They organized this event in conjunction with the third International Conference on "Mathematics and Computation in Music"\*, a multi-disciplinary conference on mathematics, computer science, music theory, composition, musicology and other related disciplines." Most conference's talks were focused on various representations of the local structure of musical texts. Composer Pierre Boulez and mathematician Alain Connes debated creativity in music and mathematics in a larger, well-attended forum. Brilliant French philosopher Alain Badiou gave a lecture on mathematics, aesthetics and the arts. Badiou concluded his talk with a non-significant classification of mathematicians referring to Plato, Aristotle and (unfortunately) Wittgenstein, but without quoting the authorized point of view of Hermann Weyl. Personally, I would have rather seen him defend Weyl's position that diverges substantially from the standard Platonist idea supported by Alain Connes during his conevrsation-with Boulez. I was invited to participate to the round-table on "Creativity in Mathematics and the Arts" that concluded the AGORA festival at the Palais de la Decouverte. It gave me the opportunity to introduce ESMA to the other guests and the audience. It may lead to additional exhibits opportunities, possibly in Marseille and in Toulouse in 2012.*

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*ESMA hopes to continue develop stronger ties with IRCAM and other institutions interested in joint collaborations such as summer/winter schools, conferences, exhibits and other public outreach programs. Konrad Polthier, who will be in charge of next year's ESMA International Conference in Berlin agrees: music and mathematics will have a more visible presence in the next conference agenda.*

*And last, a draft of the 2010 proceeding of the ESMA conference has been submitted to Springer. We will keep you informed of the progress.*

*Enjoy summer!*

*With my best wishes,*

*Claude P. Bruter*

\* IRCAM: <http://agora.ircam.fr/>  
\* MCM: <http://mcm2011.ircam.fr/>



*St Martin Basilica, Aime 6-2011. Processed with SeamlessMaker by Gerault Bousquet.  
(ESMA site Resource page, math&art, media ) © 2011 Jean Constant.*

## **ANNOUNCEMENT**

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

**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.

**MPE 2013.** A public exhibition on Mathematics of Planet Earth to amplify the visibility of the mathematics of the planet Earth. For more information contact **Christiane Rousseau**.

**ON-GOING. CNRS- GDR 2011 - Esthetic, Arts & Science.** More info on the **CNRS** site.

## 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

**July 26 -31 Bridges International Conference.** Coimbra. PO. Participating ESMA members: Constant, DeComite, Hart, Jablan, Sullivan.

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

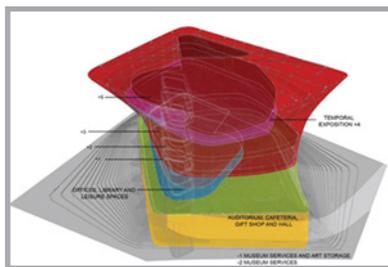
## RESOURCE CENTER

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

- **HOFFMAN-JABLAN, Jakandra.** *Symmetry of Musical Work.* ([Resource, Music](#))
- **ISAMA,** Proceeding of the 2011 Chicago Conference. ([Resource, General Interest](#))
- **JOHNSON, Tom:** *Combinatorial designs in my music.* ([Resource, Music](#))
- **MCM:** *Mathematics and Computation in Music.* Proceedings of the third International Conference of the Mathematics and Computation in Music. Paris, June 15-17, 2011. ([Resource, Music](#))

## GALLERY

### Simplexity: Torqued superellipse by Fernando Romero. Museum Soumaya in Mexico



...A variant of the torqued ellipse is the surface constructed with rotated superellipses, which may be named as torqued superellipses. A beautiful example and maybe the only one in Architecture is the Museum Soumaya in Mexico, designed by the architect Fernando Romero. The building has a height of 46 meters and features a coating of 16,000 brilliant hexagons and looks amazing from all viewpoints... From the lecture "Ovals and Ellipses in Architecture" by Javier Barrallo, University of the Basque Country. *Proceedings of ISAMA 2011. Chicago, Illinois June 13-17, 2011.*

## ESMA - SUMMER 2011



**Fractalforums.com. Annual Fractal Art Contest 2011.**

ESMA Member Jeremie Brunet (aka Bib):  
First prize - Animation/Video: "Like in a dream II"  
Second Prize - 3D: "Ballfold" . Congratulation!



### **AGORA - ESMA at the Palais de la Decouverte.**

June 1st - August 27

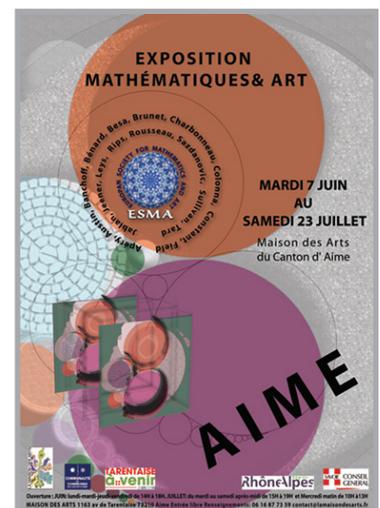
- Exhibit: Austin-Casselman-Wright, Colonna, Constant, Farkas, Johnson, Field, Leys, Razdanovic, Tard.

- MultiMedia: Vi-Hart, Leys.

### **AIME. Mathematics & Art.**

June 7 - July 23

Apéry, Austin, Banchoff, Bénard, Besa, Brunet, Charbonneau, Colonna, Constant, Jablan, Jeener, Leys, Field, Hart, Rips, Rousseau, Sazdanovic, Sullivan, Tard.



## Bridges

### **BRIDGES INTERNATIONAL CONFERENCE & EXHIBIT, COIMBRA, PO.**

July 27 - July 31

Constant, de Comite, Hart, Jablan, Sullivan.

