Newsletter

Dear Reader,

1) On October 26 2016, the Vaudois newspaper « 24 heures » published a supplement devoted to the presentation of the « Open doors » of the EPFL (November, Saturday 5 Sunday 6). The presentation of the various activities proposed to visitors occupied no less than 12 full pages (around twenty activities per page). The « expo mathématique » was announced on page 21.

It took 10 days for the boxes containing the works and coming from Italy to reach their destination. More precisely, they arrived on Friday at 2 p.m., while the exhibition had to be opened to the public on the next day at 9 a.m. That is to say that the placing of the works had to be done in haste.

One dare not think of the judgment that the clever eye of the specialist would have brought on that non professional presentation. As it was impossible to know in advance which works could be exhibited and on what place, it had been first planned to print and to set up the introductive cartels once the works being at place: their late arrival made that operation impossible.

ESMA expresses its gratitude to the technical head of the EPFL who, despite the gestion of an enormous amount of activities, was busy to find the grids necessary to the presentation of the works, to Mikaël Mayer (http: // www. mikaelmayer. com/ reflex/) and in particular to Kathryn Hess Bellwald http: // hessbellwald-lab. epfl. ch/ HessBellwald . We are indebted to their friendly welcome, to the financial and physical presence of the exhibition, to the time they generously gave to place and then to put back the works, being helped with four advanced students. The layout of the works was my responsibility.

If, going to other activities, as in particular those offered by a workshop devoted to fractals, a quite fashionable word, many visitors and their children could catch a glimpse of

the exhibition, others, a pessimistic evaluation suggests one hundred, stopped before some works for a more or less long time, asking for questions. Some people even enquire for the possibility to buy: a very abridged catalogue http://www.math-art.eu/Documents/pdfs/Lausanne/LausanneCatalogue.pdf *at the disposal of the visitors gave the mail address of the authors with whom they could eventually write.*

It is however symptomatic that the two announced conferences attracted very little public. The fact the speaker, foreign to EPFL, was an unknown person, and the absence of summary or comment on the internal EPFL posters announcing the conference may have played a role in that failure. This was very different from Florence where several announcements in the local medias had encouraged one hundred of people to attend.

2) The following lines now implicitly address administrative and political managers in general. Can they be fully aware of the richnesses and diversity of the mathematical world, of the centuries of reflection and work needed to penetrate it? Can they fully appreciate the quality and the value of the works constituting the stock of our exhibits? For it would be an injustice to present these works in a superficial manner.

The creation of the ESMA stock of artworks, due for most of them to the generosity of their authors, is an important moment in the history of mathematics, and perhaps of art as well.
On the mathematical level, it testifies to the recent resolution of five problems:
- the resolution of Klein's problem (fill up a planar disk by disjoint, except on some boundary points, smaller planar disks without leaving an empty subset),
- the resolution of the problem of understanding of the exact structure of the sphere of fourth dimensional space,
- the resolution of the problem of giving the algebraic representation of two dimensional projective space,
- the resolution of the problem of the sphere eversion,
- the resolution of problems in the research of minimal surfaces linked to the physical world.

It also testifies to the recent introduction of fractal theory, of the non less recent progress in the theories devoted to the study of movement (stochastic (or non) dynamical systems, hydrodynamics).

It also testifies to the recent introduction of objects from flexible geometry, more or less deformable, made from polyhedra, from knots, with could be used in the physical world, and perhaps in biophysics. And finally some works are associated with the introduction of new mathematical questions.

From the artist's point of view, the sharpness of the lines, the subtlety of the colors and their gradations, the richness of the hues, render most of these works chefs d'œuvre. And what a work from the point of view of the mastering of software to reach these degrees of perfection!

Does not this significant and precious stock of artworks deserve a special attention from mathematicians and public authorities in addition to acquiring its own venue ?

3) Christmas time is coming soon. It is time to make a gift, to pay the ESMA dues which will allow the placing of the next important exhibition in the fifth arrondissement in Paris in March.

Best wishes,
Claude

P.S. Below are five overviews on the exhibit in the available place of the EPFL sho- wing most of the works. For more details, look at http://www.math-art.eu/Lausanne2016.php

European Commission Interest representative
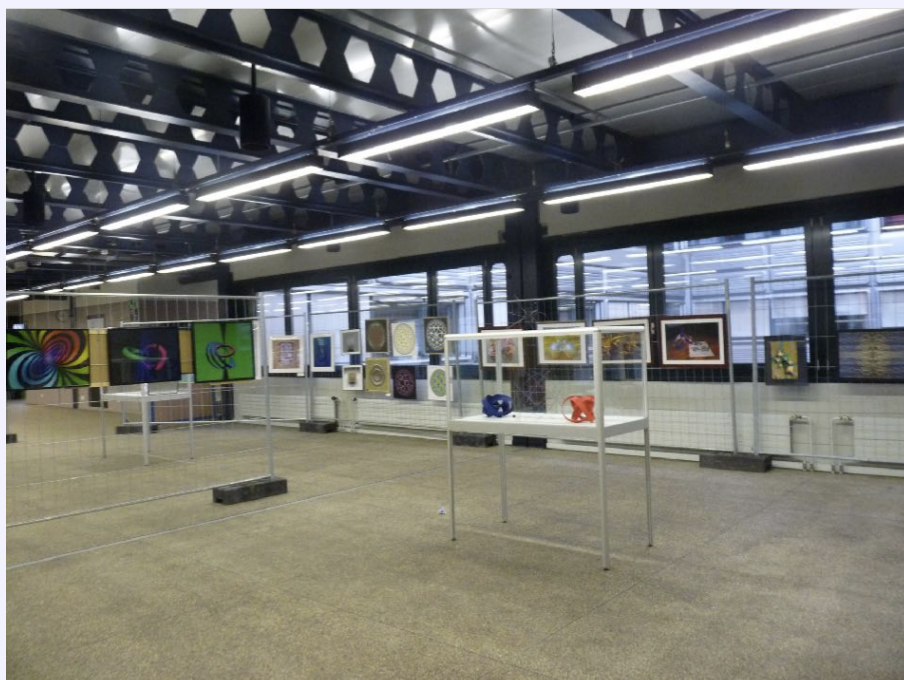
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