



Newsletter

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Dear All,

1) *Conference: Some people have asked for information on the next ESMA conference. First expected in 2012, it was delayed because of financial difficulties. News will be given in the next Newsletter.*

2) *The French Math. Soc. is going to commemorate the centennial of Poincaré's death. On the occasion of this event, on November 17, a small ESMA exhibit will be held in the great lounge of the Sorbonne.*

3) *Our website is in the process of achieving its definitive structure. A Partners section has recently been introduced. Other institutions are also welcome.*

4) *Artworks: It is interesting to have a glance on the web at the artworks related to maths which have been appearing for these last few years. Most works belong to one of these types and can be labelled under one of these three names: fractals, tilings, knots. More original works do not completely enter into these categories.*

Knots appear primarily in sculpture. These are solid knots, including solid Möbius bands. Given the limited number of shapes which are used, looking at them as a whole gives an impression of uniformity. Diversification comes mainly from their size and from the material in which they are shaped. Knots in painting are richer and more attractive.

Together with knots, tilings or quasi tilings give an impression of similarity. Not only because of the presence of the repetition of tiles, of motives, but also because of the use of similar algorithms, mainly «hyperbolic» for the moment. Artists could enrich their compositions from less classical tilings like those which appeared in papers by Y. Benoist, F. Labourie, J.-R. Geoffroy and R. Kenyon (cf [the section pavage](#)). In most cases, the tiles are the same. But some constructions possess the controlled property of auto-similarity, and may give rise to new fractal tilings.

Because in part of the richness of their content, there are now many animated fractal compositions using sophisticated software and possessing real artistic value (cf [Fractalforums.com](#)).





European Society for Mathematics and the Arts

Knots, tilings and fractals have now attained a character of banality. Truly new and original works are coming from the German school using surfer and its mathematical substratum, algebraic geometry, leading to the creation and the mastering of attractive new shapes (cf [the Imaginary website](#)).

5) *The Arpam project. There are several important aspects of the project, the presentation of which is delicate. In what sense is it a cultural project, and what might it bring to our fellow citizens, to society? What concepts and facts does it intend to share, and why? Impossible to answer these questions in a few lines. Reading the short tale, unfortunately in French, «Le merveilleux Kangourou», may give a very tiny hint to some of these answers. It will appear next month on the website.*

There are very few museums of mathematics in the world. What was created in 1937 at the Palais de la Découverte (Paris) might have been the first germ of such a museum. It is now in its twilight and might disappear. A larger modern museum is going to open its doors next month in New York. It will never reach the level of interest and of efficiency of the Arpam project.

The answers to the preceding questions will partly tell why. Also let us think about this: consider any folly. It can be seen and be visited not only from the inside, but also from its outside! Thus, how many square feet or square meters are allowed to benefit from the mathematical content attached to one folly? What atmosphere do you find yourself in when you visit the folly? Think of a crowded visit inside the large rooms of Versailles, and compare it with your stroll in the castle garden. The entire shape of the folly, its internal and exterior walls, its exterior and internal decoration are all loaded with significant facts tied to concepts. Inside the folly are paintings and objects (small sculptures, devices, a few animations) all of which can be renewed from time to time. The public comes here, not to learn mathematical techniques, but first to relax in the presence of unusual small and shining architectures which act as small museums of art exhibiting works partly or completely inspired by mathematics. Collectors of reduced models might take back home a reproduction of the Seventh Temple, of the Poincaré Surprises, or the Boy Brioche as a souvenir, copies of small sculptures as well.

*Best wishes,
Claude*

P.S. For your pleasure this month look at the works by:
Ghee Beom Kim on <http://sites.google.com/site/geometricarts/home>
Hiltrud Heinrich on http://www.imaginary-exhibition.com/galerie_view.php?gal=52.

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