



ESMA

European Society for Mathematics and the Arts

Board meeting September 19th 2013
Cagliari, 5:30 –7:30 p.m.

At the invitation of the President, the ESMA Executive Board met in Cagliari on September 19th 2013, from 5.30 to 7.30 p.m.

A) Attendance lists :

From the Board :

Present : François Apéry, Claude Bruter, Francesco De Comité, Richard Denner, Dmitri Kozlov, Andreas Matt, Denise Pranville.

Absent: Mike Field, Slavik Jablan, Jos Leys, Philippe Rips, Simon Salamon, John Sullivan.

Proxy : Jos Leys and John Sullivan to Claude Bruter

Other attendants : Renzo Caddeo, Douglas Dunham, Mateja Budin, George Hart, Renato Colucci, Paola Piu.

B) Reports

1) Financial state of the Society, presented by C. Bruter (cf the appendix).

Last cash (05/11/2012) : current account 616.29, Savings 2726.83.

Recent cash (08/09/2013) : current account 282.32 €, savings (Livret A) : 439.06 €

17 members or institutions paid their subscriptions, amounting to a total of 580.47 €

Subsidies: from CNRS 1000 €; from CAP Math 2500 €(should be received now in October).

Main spending: Catalogue (3416.32), Bank (192.24), Material for exhibitions (326.15).

ESMA has to find how to get more dues. One can pay the 30 €dues either by sending a check to ESMA, or by directly using the IBAN number that can be obtained from our website, clicking on «adhesion». Given the unfortunate policy used by the

banking system - Dough Dunham sent 40 \$ and ESMA received only 7.47 €-, people living outside of Europe are exempt from paying dues.

In the case of need for some very specific project, Andreas Matt suggested that we could appeal to the ESMA members generosity for donations.

Two main reasons to become a member of ESMA: to be an artist interested in mathematics or to be a mathematician interested in art, for pedagogical reasons among other.

2) Exhibitions of 3D works (François Apéry)

François Apéry suggests that ESMA could acquire a 3D printer for the creation of models. As the society ESMA is located in IHP, this material could stay in this place. Claude Bruter says that ESMA could use Gregorio Franzoni's printer in Cagliari. Perhaps would it be possible to create an "association" of several universities in Europe for the realization of these works.

Andreas Matt explains that there are millions of euros coming from private funds and government for museums, that there is a project of extension of IHP with the creation of a museum of exact sciences which could get some 3D printers. Claude Bruter is very doubtful about this amount of money and the rapidity of creation of that museum.

(Addition (October 2): Chantal Demols, communication and media manager of IHP and CNRS, met at the IHP, is rather pessimistic about the advancement of that project).

Claude Bruter thinks we have to wait for the creation of the IHP museum, and otherwise thinks about a team of Europeans institutions that would join to create objects. If we announce this project to the mathematical community, we may interest more people having questions about how to teach mathematics.

3) Exhibitions of 2D works (Claude Bruter, Andreas Matt)

UNESCO considers it will be useful to have exhibitions in Africa and will look for the funding of these exhibitions.

(addition (October 4, from a phone call): UNESCO is preparing an official document, a joint venture with ESMA for the diffusion of ESMA exhibitions in Africa, and more generally in connection with the possibility to realize the ARPAM project anywhere).

The exhibition in Marseille failed this year, but from a discussion with the Director of the CIRM, it should happen next year. Patrick Foulon should send the period during which the exhibition should be hold, together with the mathematical themes of the

corresponding seminars so that we could make more precise the content of the exhibitions. We shall work with Andreas Matt for this exhibition.

There is a difference of conception between ESMA exhibitions and Imaginary : as explained by Andreas Matt, Imaginary organizes many exhibitions with Surfer so that schools create works. ESMA uses the works as pedagogical examples during introductory lectures. C.Bruter says that Cap Math asked him to make publicity for our catalog which is partly subsidized by Cap Math.

4) The ARPAM project (Dmitri Kozlov)

Known as the Arpam project, there is a project of mathematical park which was conceived around 20 years ago. People in Russia are interested in. Members of the Russian Council from the Kaluga area (south of Moscow) said it is quite possible to have a domain where the park could be set up. It could be near the place where Chebichev was born. UNESCO agreed to give its official support.

Since there are projects of such parks in France, in Russia, perhaps in Greece, in China and everywhere, an International Internet Portal “Mathematical Park” could be created.

(Addition: (October 7): After the conference, I discussed with Dmitri of his suggestion: 1) since there are already several realizations in the world named «Mathematical Park», whose content are quite different from the Arpam project, the proposed name Math Park does not show the originality of the project and of its content. An other appropriate name should be found. I suggested today the name of Artistic Pedagogical And Mathematical Park, whose acronym is ARPAM Park. 2) The initial ARPAM project was already conducted by an international board, and the realization of this project has been included among the activities of ESMA, which has also an international board. Then the portal suggested by Dmitri could be included within the ESMA website).

The project in Russia plans eleven pavillions names follies in architectural terms. D. Koslov shows a few of them, including some photos of the possible domains in the Kaluga area.

Claude Bruter says that, in order to first complete the visualization of the project, then to prepare the technical plans, we need somebody or rather some team who, at the same time, knows mathematics, computing, and has artistic capabilities. Difficult. F. Apery says that the whole project needs an amount of money and asks who will be the first to give money.

Claude Bruter says that when we will have the official agreement of UNESCO, we will have a label and it will be easier to get money from foundations. He recalls that we got documents from the actual local Russian government in Kaluga which approves the project.

One has first to choose the domain in the Kaluga area: there are four local possibilities, and for each one, one has first to evaluate the cost of implementation of

the electricity-, water-, communication- networks, before making a rational choice between these domains. The realization can but progress very slowly.

Andreas Matt asks whether this project is an ESMA's project. Claude Bruter answers that since the beginning, ARPAM, had an international board (Australia, China, Denmark, France, Great Britain, Holland, Great Britain, USA). Now the realization of the ARPAM project is included in the ESMA activities.

5) Activities of the members of the ESMA board

After the derelection of the first webmaster, a lot of work has been done in the new creation and the setting up of our website. Francesco De Comitè introduced a first sketch of its structure, Richard Denner, the current webmaster, made a huge technical work. We have got today the reports by François Apery, Dmitri Kozlov and Andrea Matt, while our devoted secretary, Denise Pranville, is noting this meeting. We had the support from John Sullivan, from Jos Leys who worked, and Mike Field as well, on the creation of the new present logo. Unfortunately we got no news from other former members who might not be any more interested into ESMA.

6) Renewal of the ESMA board

To in part reinforce the visibility of the European local communities involved math and art and of ESMA as well, Claude Bruter suggests that these local communities be explicitly represented inside the ESMA board. Kristof Fenyvesi (Finland), Gyorgy Darvas (Hungary), Renzo Caddeo (Italy), Mateja Budin (Slovenia) accepted to be new members of ESMA board.

(Addition (October 2): Alexey Sossinsky accepted to represent Russia).

7) Next meeting

George Hart agreed with the idea to have a joined conference with Bridges. Mateja Budin considers it quite possible to have the next ESMA conference in the capital of Slovenia, [Ljubljana](#) within two or three years. The practical organization of the conference will be discussed among all the organizers in order to get the best use of the Bridges and ESMA specificities.

8) Conclusion

There are several topics we may think about, as:

- How to develop the strategy of our pedagogic role.
- How to produce objects.
- What is the effect of the use of computers on the program of mathematics?

9) Meeting adjournment

The meeting was adjourned at 7.30 p.m.

Claude Bruter
President

Denise Pranville
Secretary

Appendix

Bilan Financier au 08.09.2013

Crédit Mutuel

Dépenses		Recettes	
<u>Compte chèques</u>		<u>Compte chèques</u>	
Poste	1.45	Avoir au 05.11.2012	616.29
Bruter (SACD)	25	Cotisations	580.47
Bruter (site OVH, 7 ans)	58.52	CNRS	1000
Bruter (russes)	37	Ext.remb.frais	1.20
SGT	90.50	Livret	2350
Suppléments	9.70		
Euro-Info (pour virements par cartes bancaires) (seront, à titre commercial, exceptionnellement restitués en		Total	4547.96
Septembre	92.04		
Frais chèques	1.35		
Fournitures Bureau -Vallée	89.96		
Fournitures cadres (Zodio, Leroy-Merlin)	82.63		
Imprimerie Launay	154		
Graphiste (Matthieu)	1070		
Imprimeur IME	2346.32		
Assurances (MAIF)	207.17		
Total	4265.64		

Avoir compte chèques au 05.09.2013 :	282.32
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Livret

Vers Compte chèques	2350	Avoir au 05.11.2012	2726.83
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		Intérêts	62.23
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Avoir Livret au 05.09.2013 :	439.06
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Dûs à Bruter : Launay 6 + Poste 3.15
À recevoir de CAP Maths 2500