

## Declaration of the three French learned societies for mathematics

(Société Française de Statistique (SFdS),

Société de Mathématiques Appliquées et Industrielles (SMAI),

Société Mathématique de France (SMF))

### **Open Access : a warning on the inherent flaws of the « author pays » model**

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The French learned societies for mathematics (SFdS, SMAI, SMF) wish to warn the administration and the French scientific community of the perverse effects of the « author pays » model in scientific publishing. The subject has already surfaced in the press on two occasions under the heading « Open Access » : when Great Britain decided that all government funded university work should be immediately available at no cost<sup>1</sup>, and when the European Union adopted a similar position<sup>2</sup>.

A large proportion of mathematical articles are already freely available on the internet, those registered on the free access servers such as ArXiv or HAL, and those appearing on personal web pages (currently referred to as *Green Open Access*). These practises have become more widespread following the *Berlin Declaration*<sup>3</sup> which encourages their use.

Today however the situation is quite different. The unselfish idea that articles be available at no cost on the internet is at risk of being perverted and derailed by certain large commercial publishers who wish to impose the so-called *Gold Open Access* (or « author pays ») model, where the article is freely available online only after its author or his institution has paid the publisher a handsome sum (2000 euros per article is being mentioned in mathematics – a very large amount when compared with the financing of research units!). This is the choice that has been made by the British government. The learned societies for mathematics wish to warn the relevant French authorities of the dangers of *Gold Open Access*.

It is often said that the generalisation of *Open Access* will avoid the taxpayer paying twice, as is currently the case: firstly via the public funding of research, and secondly for the subscription fees paid by scientific libraries. Nothing changes in the new *Gold Open Access* model, as the taxpayer continues to pay twice, paying as before via the public funding of research, and then paying for the publication of the articles (the amount involved being the result of what is up until now an opaque calculation). It is also said that Open Access removes inequalities, which, from the readers' point of view cannot be denied (the reader already profits greatly from *Green Open Access* and can always contact authors directly). But a researcher is always both author and reader. And when it comes to

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<sup>1</sup> 14 July 2012

<sup>2</sup> 17 July 2012

<sup>3</sup> see <http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/>. In particular this was signed in France by the CNRS, the INRIA and the Conference of University Presidents.

publishing, *Gold Open Access* cannot but greatly increase inequalities, whether between different research units, or between members of the same research unit. The search for the required finance will of necessity bring back old habits of nepotism and patronage, while possibly leaving aside first class work. And what about the aggravation of inequalities between countries that can afford to invoke such financial models and those that cannot?

It is clear that scientific publishing is in a state of upheaval, and one cannot really say what will be tomorrow's system. The internationalisation of research, the proliferation of open archives, the ongoing abandonment of paper in favour of electronic publishing, the continuing improvement of access to online resources, the exponential increase in the number of articles, the unlimited financial ambitions of some commercial publishers and their policy of obligatory grouped subscriptions, all these factors mean that the current system must change. One can imagine publishing models other than *Gold Open Access* which would preserve the interests of the different participants (authors, publishers, libraries, research laboratories, financing institutions), while at the same time allowing open, cost-free access to all, in accordance with the Berlin Declaration. Such access could have a period of embargo or other limitations for some fixed time following publication. The publication of scientific results could also evolve towards systems other than the journals we know today<sup>4</sup>, as long as the new systems guarantee long term access to archives, and take into account publication costs, however modest.

Whatever the future, and whatever the economic models towards which the international community is headed, the French administration and the French scientific community must urgently consider this problem, both for the medium-term perspective and for the change-over period.

Authors, the main actors in scientific creation, must be closely involved in the elaboration of these new models. The French learned societies for mathematics are ready to participate in the upcoming discussions. If there is a centralised decision in favour of *Open Access* type public access to research results, they wish to warn the French administration of the potential perverse effects arising from the *Gold Open Access* System.

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<sup>4</sup> Whatever the system adopted, the quasi-unanimous wish of the mathematical community is that the current system of evaluation by one's peers of scientific papers before their acceptance (*peer-review*) should remain the norm. This system relies on the unpaid work of scientists. It ensures the quality of published papers.