



Publishing research articles in Diamond Open Access

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CEIC-IMU meeting*



1990s, Researchers designed their tools

- In 1978, the computer scientist *Donald Knuth* (Stanford University) published the *Open Software TeX* for typesetting research articles, in particular for mathematical formulas.
- In 1990, the physicist and computer scientist *Tim Bernes-Lee* (CERN) created the *Open Protocol http* of *WWW* without patenting it in order that it could be adopted by anyone.
- In 1991, the physicist *Paul Ginsparg* (Los Alamos National Laboratory) created the *Open Platform ArXiv* to share preprints for exact sciences, the submission rate today is above 10 000 articles/month.
 - In 1994, the economist *Michael Jensen* (Harvard University) created the *Open Platform SSRN* to share preprints for social sciences, it was the largest repository in 2013 but *Elsevier* bought it in 2016.
- In 1998, the education scientist *John Willinsky* (Simon Fraser University) released the *Open Software OJS* to manage editing and peer-reviewing, used today by more than 10 000 research journals.



2001, SPARC declared independence

Declaration of SPARC (Scholarly Publishing and Academic Resources Coalition) :

Please join me in DECLARING INDEPENDENCE from publishers and journals that do not serve the research community.

We scientists *can* exercise control of our journals. We can transform them from commercial commodities back to instruments of service to education and research. When we are in control, we fulfill our responsibility to ourselves, to society, to our institutions, and to our colleagues throughout the world.

In recent times, purely commercial interests have gained sway over too many of the journals that we depend on for research information. Maximizing profits has become the controlling goal. A system that should serve us is at the mercy of corporate acquisitions and profit-oriented planners. Disseminating scholarly research seems to be an afterthought.

A Guide to Creating

Community-Controlled

Science Journals



Michael L. Rosenzweig

Editor-in-Chief, *Evolutionary Ecology Research*

Professor, Department of Ecology and

Evolutionary Biology, University of Arizona

http://openscience.ens.fr/ABOUT_OPEN_ACCESS/DECLARATIONS/



2002, Budapest Open Access Initiative

To achieve open access to scholarly journal literature, we recommend two complementary strategies:

- I. **Self-Archiving:** First, scholars need the tools and assistance to deposit their refereed journal articles in open electronic archives.
- II. **Open-access Journals:** Second, scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access.

These new journals will not charge subscription or access fees, and will turn to other methods for covering their expenses, including the foundations and governments that fund research, the universities and laboratories that employ researchers, endowments set up by discipline or institution, friends of the cause of open access, funds freed up by the demise or cancellation of journals charging traditional subscription or access fees.

There is no need to favor one of these solutions over the others for all disciplines or nations, and no need to stop looking for other creative alternatives.

2003, Berlin Declaration on Open Access

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities

Preface

The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access.

Goals

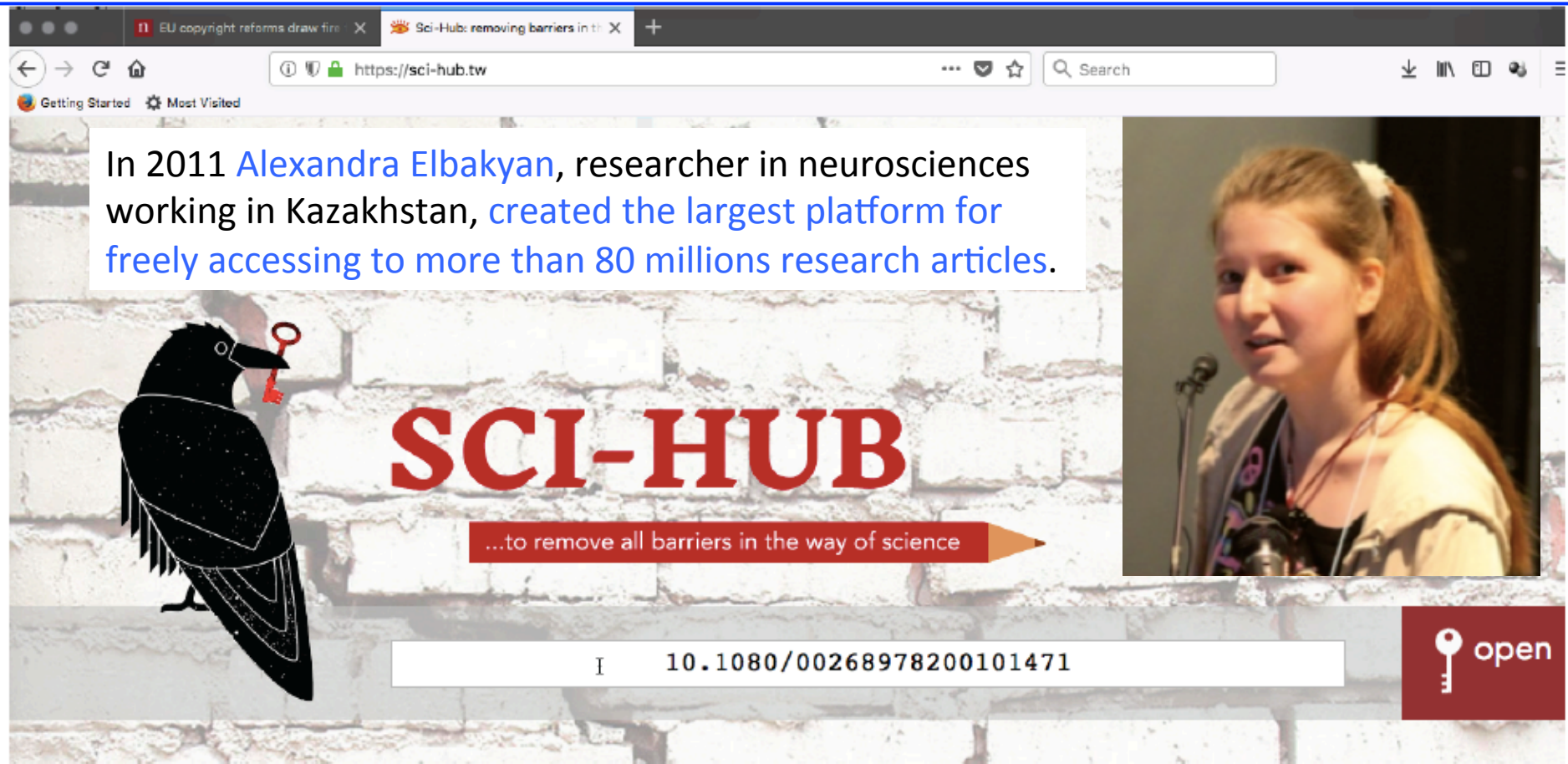
Our mission of disseminating knowledge is only half complete if the information is not made widely and readily available to society. New possibilities of knowledge dissemination not only through the classical form but also and increasingly through the open access paradigm via the Internet have to be supported. We define open access as a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community.

In order to realize the vision of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive, and transparent. Content and software tools must be openly accessible and compatible.

http://openscience.ens.fr/ABOUT_OPEN_ACCESS/DECLARATIONS/



2011, a young researcher innovated



In 2011 [Alexandra Elbakyan](#), researcher in neurosciences working in Kazakhstan, created the largest platform for freely accessing to more than 80 millions research articles.

SCI-HUB

...to remove all barriers in the way of science

10.1080/00268978200101471

open

When an article is behind a pay-wall copy its *DOI* (*Digital Object Identifier*), then open *Sci-Hub* and enter its *DOI*

<http://openscience.ens.fr/OTHER/SCIHUB/>



2011, How I learned about publishers

As member of the COMETS (Ethics Committee of CNRS), chaired by *Jean-Pierre Bourguignon*, I wrote the '*Recommendation on the relations between researchers and publishers*'.

To this end, I interviewed librarians in charge of negotiations with publishers and lawyers specializing in intellectual property. **It was a shock for me to realize how brutal these negotiations are and how dramatic the lack of information researchers have about them.**

A researcher, *Jacques Lafait*, who advised the President of UPMC (Paris VI University), had the courage to testify on the conflict his university had with *Elsevier*. **In 2011 UPMC refused to renew its subscription to *Freedom Collection* (bundle of all journals owned by *Elsevier*).** His testimony was appended to my report (but CNRS removed it from the published version):

The proposed new contract stipulates that the historical sales figures of the establishments must be maintained, thus preventing any documentary policy tailored to the university's needs. The President of UPMC then officially informed Couperin's negotiators of his decision to withdraw from the consortium.

A marathon of negotiations then began between January 14 and 19, 2011, through Couperin. After several round-trips, UPMC obtained:

- (i) a €125,000 reduction in subscriptions in 2011 and a €100,000 reduction in 2012 (i.e. a 21.6% reduction),
- (ii) a contractual commitment by the publisher to provide Couperin and UPMC with a new business model by December 15, 2012 at the latest, initiated in 2011 with pilot establishments including UPMC. Should Elsevier fail to comply with this clause, any institution wishing to do so will be entitled to leave the group for 2013.

http://openscience.ens.fr/MARIE_FARGE/ARTICLES/2011_06_27_AVIS_POUR_LE_COMITE_D_ETHIQUE_DU_CNRS



2012, some mathematicians revolted

On 9 February 2012, *Tim Gowers* and 33 mathematicians published *The Cost of Knowledge* calling to boycott *Elsevier* and stop the *Research Works Act*, a bill in the U.S. Congress owed to *Elsevier's* request to repeal open access policies. On 27 February, *Elsevier* withdrew its support.



Sir Tim Gowers,
Cambridge University
and Collège de France,
Fields medal 1998

⇒ *Tyler Neylon* set up a website for researchers to sign up:

<http://www.thecostofknowledge.com>

20576 Researchers Taking a Stand. *See the list*

Academics have protested against Elsevier's business practices for years with little effect. These are some of their objections:

1. They charge exorbitantly high prices for subscriptions to individual journals.
2. In the light of these high prices, the only realistic option for many libraries is to agree to buy very large "bundles", which will include many journals that those libraries do not actually want. Elsevier thus makes huge profits by exploiting the fact that some of their journals are essential.
3. They support measures such as SOPA, PIPA and the ~~Research Works Act~~, that aim to restrict the free exchange of information.



2012, press relayed CoK's boycott

For many years economic press and finance experts have been observing researchers as the goose that lays the golden eggs for publishers (up to 40% profits)...

The
Economist

22/1/1998

Publishing, perishing, and peer review

Could new kinds of electronic publishing rescue academia from its long-running “journals crisis”?

The Economist, January 22nd 1998

The
Economist

4/2/2012

Scientific publishing

The price of information

Academics are starting to boycott a big publisher of journals

Feb 4th 2012 | from the print edition

Commercial publishers have begun to experiment with open-access ideas, such as charging authors for publication rather than readers for reading. But if the boycott continues to grow, things could become more urgent. After all, publishers need academics more than academics need publishers. And incumbents often look invulnerable until they suddenly fall. Beware, then, the Academic spring.

Mathematicians Organize Boycott of a Publisher

13/2/2012

The New York
Times

More than 5,700 researchers have joined a boycott of Elsevier

The signers included three Fields medalists — Dr. Gowers, Terence Tao and Wendelin

Werner. The statement was also signed by Ingrid Daubechies, president of the

International Mathematical Union, who then resigned as one of the unpaid editors in chief at the Elsevier journal Applied and Computational Harmonic Analysis.

http://openscience.ens.fr/ABOUT_OPEN_ACCESS/ARTICLES/



2012, CoK's concern about EU policy

Date: Thu, 7 Jun 2012 04:52:26 +0200 (CEST)

From: farge <farge@lmd.ens.fr>

To: Daubechies Ingrid <ingrid@math.duke.edu>, Timothy Gowers <W.T.Gowers@dpmms.cam.ac.uk>, Cohn Henry <Henry.Cohn@microsoft.com>, Taylor Richard <rtaylor@ias.edu>

Dear Ingrid, Tim, Henry and Richard,

At this stage we still have few weeks to act and try to make sure the final statement will be compatible to what we want. I see several propositions we should make to the EU persons preparing it :

- 1 - only Open Access be mentionned, without precising the way this will be implemented. If Gold OA or Green OA are decided and explicitly mentionned in the EC statement, this means that publishers win!
- 2 - if Gold OA and Green OA are mentionned it should be required that the fees (paid by authors and/or readers) should be the lowest on the market. We have to be very careful not to let publishers fix the price they wish. Indeed, the three largest publishers (Elsevier, Springer, Wiley/Blackwell) are organized as a cartel and employ the same lobbyists in Bruxelles, pretending they guarantee the quality of peer-review and thus justifying the high fees they ask (to us...).
- 3 - what we want is Free OA (neither the author nor the reader pay any fee) with the argument that the EU budget is large enough to offer facilities (supercomputers, satellites, tokamaks...) scientists need to produce results, EU should offer the publishing platforms we need to discuss, peer-review and diffuse our ideas and results.



2012, CoK proposed Diamond OA



Diamond Sutra is the oldest dated printed book: printed with wooden blocks, dated 11th May 868, discovered in 1900 in the Mogao Caves (China), and brought to London in 1907.

<https://www.bl.uk/collection-items/the-diamond-sutra>

The *Diamond Sutra* of the *British Library*, the oldest printed and dated text we know, contains **Bouddha teachings** and mentions :
'On the 15th day of the 4th month of the 9th year of the Xiantong reign period (11 May 868), Wang Jie had it made for universal distribution on behalf of his two parents.'

Since neither readers nor authors had to pay, I proposed to name this model *Diamond OA*.

It also **outbids the Gold OA model** of publishers and May 2012 was **Elizabeth II's Diamond Jubilee**.

http://openscience.ens.fr/OPEN_ACCESS_MODELS/DIAMOND_OPEN_ACCESS/2012_06_07_Mail_Marie_Farge_to_Tim_Gowers_to_propose_Diamond_Open_Access.pdf

'Neither author nor reader should have to pay to publish and a journal should no more belong to a publisher but to its editorial board. Peer-reviewing and publishing are done using public infrastructures where articles are archived and accessible online for free.'

June 29th 2012, Marie Farge, Note for the French minister of higher education and research :
http://openscience.ens.fr/MARIE_FARGE/ARTICLES/2012_06_29_NOTE_POUR_LA_MINISTRE_DE_LA_RECHERCHE



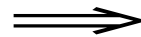
Diamond Open Access model

Authors deposit their preprint in an open repository (e.g., arXiv), which is thus officially dated and published in open access for free. Authors then submit their preprint to a journal to be peer-reviewed (i.e., checked by referees, improved, revised) and published, if accepted.

If accepted, the article is published in open access with a CC-BY license, which allows anyone to distribute it as long as its authors are credited. Authors retain their copyright and don't have to pay to publish.

<https://creativecommons.org/licenses/>

Editors collectively own the title and assets of the journal, because they are responsible for peer review which requires a high level of expertise. Editors and referees provide this service gratis as part of their academic duties.



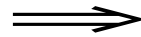
Publishers are no longer the owners of peer-reviewed journals but only service providers. Editors can thus choose on a competitive basis among the various services offered by publishers, if they need them.

http://openscience.ens.fr/OPEN_ACCESS_MODELS/DIAMOND_OPEN_ACCESS/



Need for public publishing platforms

Funding agencies should provide for free to researchers
publicly-owned non-for-profit publishing platforms,
as infrastructures for research on the model of computing centers,
to peer review and publish research articles
with the help of librarians and publishers as service providers.



They should be developed using open source software
(e.g., *Open Journal System* or *Invenio*), in order to be able
so that new designs can be shared and best practice disseminated.

The governance of publishing platforms is an important issue,
which should be organized along the lines of computing centers,
with a scientific committee responsible for selecting journals
that are good enough to merit free publication. Such a selection helps
to control the quality of peer review, by selecting journals with
excellent practices and reputable editors with limited mandates.

Such publishing platforms would also provide researchers
tools to experiment new ways of peer-reviewing and publishing
(e.g., open peer review).



Public publishing platforms already existed

 Brasil
+
 África do Sul
 Argentina
 Brasil
 Chile
 Colômbia
 Costa Rica
 Cuba
 Espanha
 México
 Peru
 Portugal
 Venezuela
+
 Bolívia
 Paraguay
 Uruguai



Created in 1997,
it publishes
1 458 journals
from 17 countries
in open access,
financed by public
agencies from Brazil
(FAPESP, CNPq,
CAPES) and from
other countries.



Created in 1999,
it publishes
586 journals, 12 851 books
in open access,
financed by public
agencies from France
(CNRS, EHESS, MESR,
Aix-Marseille and
Avignon universities).



2016, Europe wants a legal *Sci-Hub*

On 4 April 2016 *Carlos Moedas*, the European commissioner for research, science and innovation launched the *Amsterdam Call* :



"We must create infrastructure. Europe's final transition must be one from fragmented datasets to an integrated European Open Science Cloud. By 2020, we want all European researchers to be able to deposit, access and analyse European scientific data through a European Open Science Cloud"

Commissioner Carlos Moedas, Amsterdam, 4 April 2016



http://openscience.ens.fr/DECLARATIONS/2016_04_04_EC_Amsterdam_Call_for_Action_on_Open_Science.pdf



2017, OA peer-review and publishing

At the request of Carlos Moedas I wrote the chapter on open access to peer-reviewed research publications in a book published by the Commission in 2017.



Scholarly publishing and peer-reviewing in open access¹

Marie Farge,
CNRS and Ecole Normale Supérieure Paris
<marie.farge@ens.fr>

I argued that **research articles**, as well as **peer review reports**, should be **available free of charge**, for both authors and readers, **to ensure** that **published results** have been **validated** and are **reproducible**.

[http://openscience.ens.fr/MARIE_FARGE_ARTICLES/
2017_05_15_BOOK_CHAPTER_FOR_THE_EUROPEAN_COMMISSION](http://openscience.ens.fr/MARIE_FARGE_ARTICLES/2017_05_15_BOOK_CHAPTER_FOR_THE_EUROPEAN_COMMISSION)



2018, Creation of the *Mersenne* Center

The *Mersenne* center has been created in 2018 in Grenoble as part of *Mathdoc*,
a service unit of *CNRS-INSMI* and of the *University of Grenoble*,
as a Diamond Open Access platform for publishing and peer-review research journals

Guiding principles:

- High quality of peer review,
- Non-profit public service,
 - Perpetual archiving,
 - Transparency of costs,
- Transparency of journal selection.

Type-setting is done with the open source software *LaTeX*,
while the editorial process and publication are done
with the open source software *OJS* (*Open Journal System*).

<https://www.centre-mersenne.org/en/>



2018, Diamond OA platform *Mersenne*

The Mersenne project has been initiated to address a growing demand within the scientific community for scientific publication alternatives.

The Centre Mersenne is created as an alternative publishing venue:

- public and not-for-profit (no privatisation of the research outputs),
- open access (to foster the dissemination of research results),
- diamond open access (no fee for the reader to read and the author to publish),
- sustainable and affordable,
- created by researchers for researchers.

The Centre Mersenne has a dual purpose:

- to promote scientific publishing and foster dissemination of open access publications: existing journals as well as newly-created journals,
- to offer, at affordable price, all the necessary tools and professional services to editorial teams to help them manage their journal.



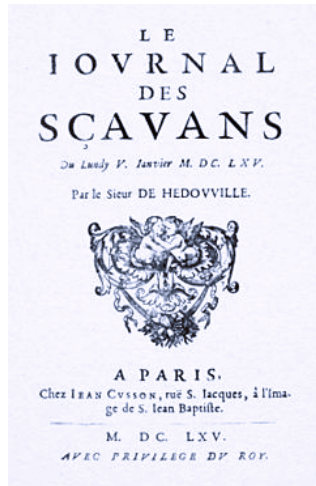
⇒ Mersenne employs **15 part-time persons** and its **production cost is on average 700 € per article and 35 €/pages**, which is **financed by French public research funding institutions** :



<https://www.centre-mersenne.org/en/>



2020, CRAS left Elsevier for Mersenne



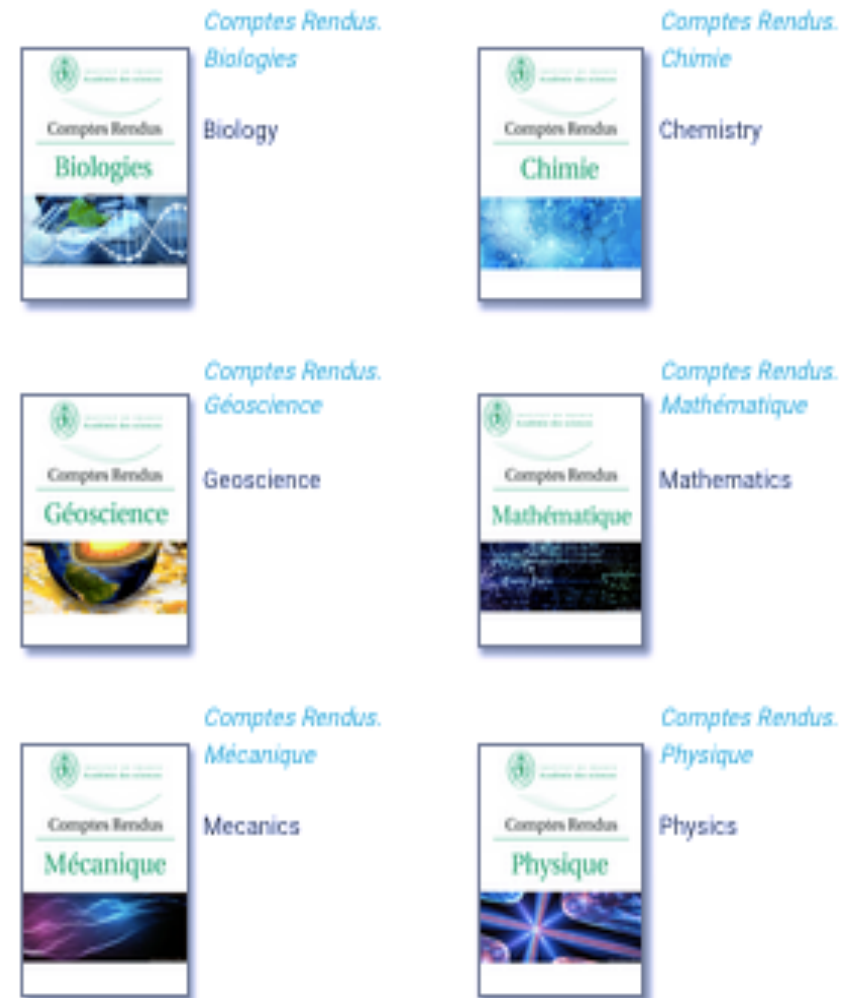
5th January 1665

In 1665, creation of the '*Journal des Sçavans*'.
In 1835, creation of the '*Comptes-Rendus de l'Académie des Sciences*' (CRAS), which were published by *Gauthier-Villars*.
In 2000, *Elsevier* bought *Gauthier-Villars*.

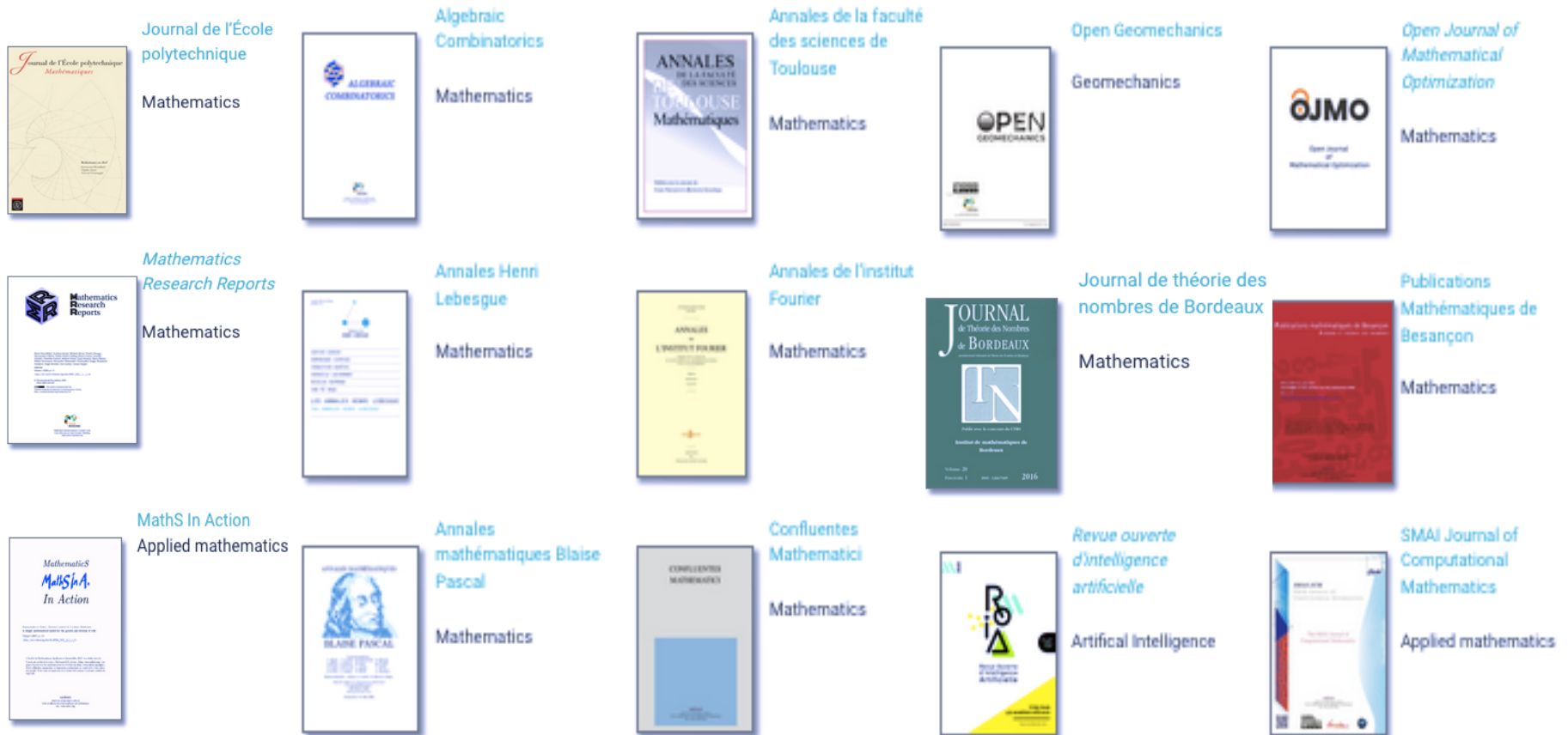
'It would be an excellent advertisement for the *Académie des Sciences de Paris* if its *Comptes-Rendus* were published using the Diamond OA model.'

Marie Farge, Note for the French minister of research, 29 June 2012
http://openscience.ens.fr/MARIE_FARGE/ARTICLES/2012_06_29_NOTE_POUR_LA_MINISTRE_DE_LA_RECHERCHE

Since 2020, CRAS are published, no longer in Gold Open Access by *Elsevier*, but in Diamond OA by the platform *Mersenne*.



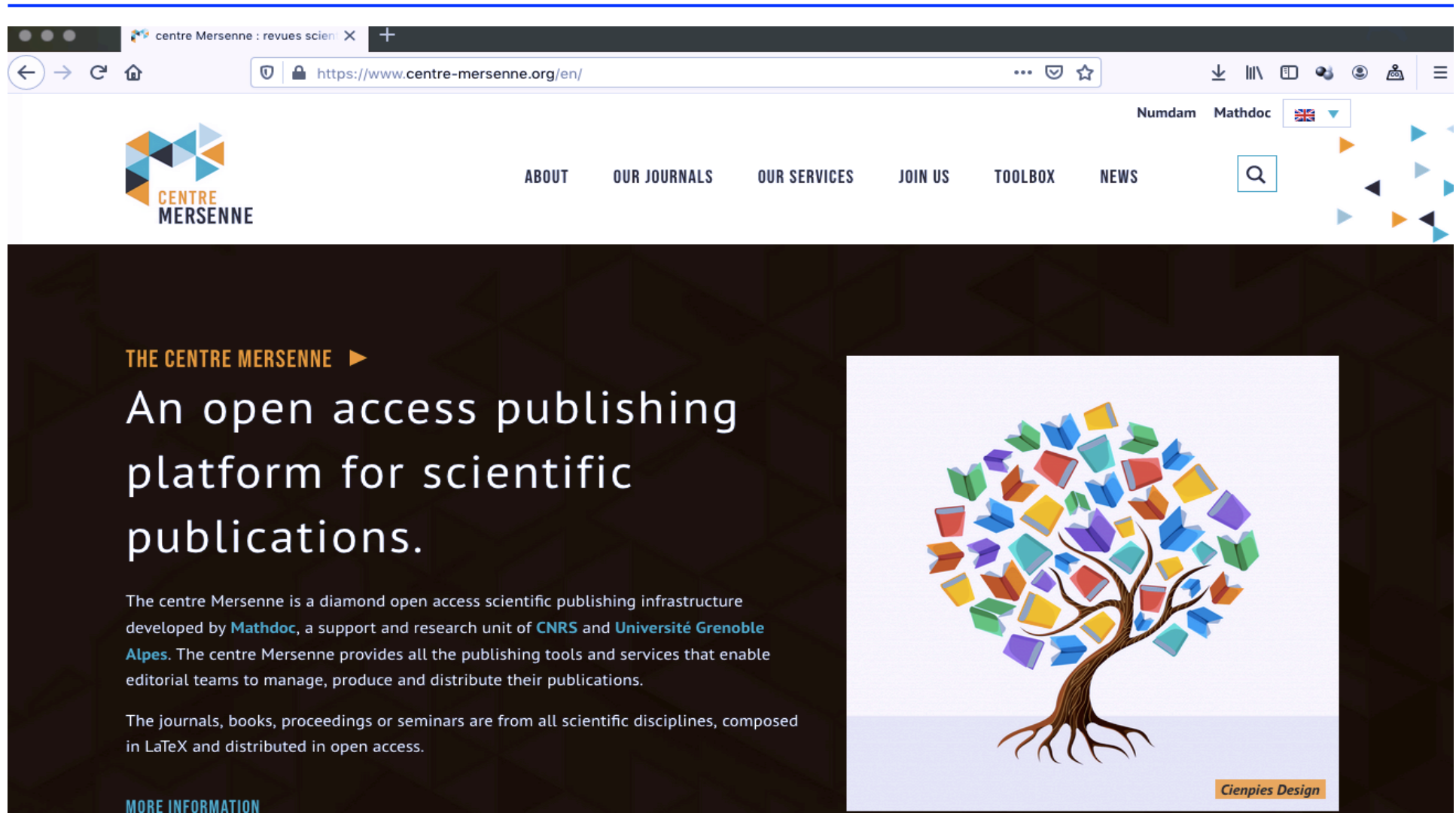
2023, Journals published by *Mersenne*



Mersenne also publish other journals (e.g., *CRAS* and *Peer Community Journal*) together with conference proceedings, seminars and books.



2023, new design of the *Mersenne Platform*



The screenshot shows the homepage of the Centre Mersenne website. The browser address bar displays <https://www.centre-mersenne.org/en/>. The website header includes the Centre Mersenne logo, a navigation menu with links for ABOUT, OUR JOURNALS, OUR SERVICES, JOIN US, TOOLBOX, and NEWS, and a search icon. The main content area features a dark background with the text: "THE CENTRE MERSENNE ► An open access publishing platform for scientific publications." Below this, a paragraph describes the Centre Mersenne as a diamond open access scientific publishing infrastructure developed by Mathdoc, a support and research unit of CNRS and Université Grenoble Alpes. It provides publishing tools and services for editorial teams. Another paragraph states that journals, books, proceedings, and seminars are from all scientific disciplines, composed in LaTeX and distributed in open access. A "MORE INFORMATION" link is provided. To the right, there is an illustration of a tree where the leaves are replaced by colorful books, with the text "Cienpies Design" at the bottom right of the illustration.

<https://www.centre-mersenne.org/>



2023, Global Summit of Diamond OA

GLOBAL SUMMIT ON DIAMOND OPEN ACCESS

OCTOBER 23 - 27, 2023. TOLUCA, MEXICO



Marie Farge (You)

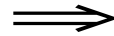
00:35

I consider that the existence of a Scientific Council responsible for selecting and monitoring journals which use the platform for free is an important element of the DOA model because it offers a feed-back to improve the quality of peer-review. Indeed, the Scientific Council can ask journals applying for free publication to justify the scientific quality of their editorial board and its organization: length of terms of the board members, distribution of their responsibilities, length and level of analysis of the referee reports they have produced.

Do you agree?

Conclusion

Ideas are not of the same nature as material products because when you give an idea you do not lose it, therefore no need to be paid. Sharing ideas is a positive-sum game, because you lose nothing while if an idea is not shared, it is lost forever!



Knowledge is not a product to be traded, but a commons to be shared.








In 2009 Elinor Ostrom got the Nobel prize in economic sciences for: *her analysis of economic governance, especially the commons, showing how common resources can be managed successfully by the people who use them, rather than by governments or private companies*'.

Charlotte Hess and Elinor Ostrom,
Understanding knowledge as a Commons,
MIT Press, 2006



For more information about open access

<http://openscience.ens.fr>

 O A lire.pdf	02-Mar-2018 21:58 103K
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 COPYRIGHTS AND LICENSES/	30-Nov-2018 23:16 -
 MARIE FARGE/	30-Nov-2018 23:24 -
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<https://dissem.in/>

