

Academia Europaea - Barcelona Knowledge Hub International Women's Day 2017



The Barcelona Knowledge Hub of the Academia Europaea is joining the celebration of the International Women's Day 2017 by organizing an activity on March 2, in Barcelona.

March 2, Thursday

Time: 18.00 h - 20.00 h

Location: Prat de la Riba Room, Institute for Catalan Studies (Carme 47, Barcelona)

An AE-BKH International Women's Day Distinguished Lecture on

“Scientific knowledge as a commons: How to improve the peer review and dissemination of scientific results”

Marie Farge

CNRS and École Normale Supérieure, Paris
Member of the Council of the Academia Europaea

With the collaboration of:



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**A Distinguished Lecture in commemoration of the International Women's Day 2017 at the
Barcelona Knowledge Hub of the Academia Europaea (AE-BKH)**

Scientific knowledge as a commons: How to improve the peer review and dissemination of scientific results

Marie Farge

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Scientific publication in peer reviewed journals is the backbone of the current research system. Nowadays the process of peer reviewing and the dissemination of articles are controlled and privatized worldwide by publishers, they own the journals, peer review reports, and articles they publish. Researchers are not paid by publishers for writing articles and referee reports, but research institutions have to pay huge amounts of money to publishers to access those articles, while the referee reports are non-disclosable and lost to research. Unfortunately researchers are kept in the dark about the business model of publishers and how much it costs to their institutions. The business model of publishers made sense when they were printing houses, but it has become harmful for research now that Internet can be used instead.

We will first describe the present system and then propose alternative solutions that take advantage of the digital revolution and consider scientific knowledge as a commons. This new approach is inspired by the work of *Elinor Ostrom*, the only woman having ever received the Nobel prize in economic sciences for '*showing how common resources can be managed successfully by the people who use them rather than by governments or private companies*'. [1]

Knowledge, like language, is not a merchandise to be traded but a commons that everyone should share worldwide and preserve for the generations to come. Scientific results that are not shared nor preserved are lost forever. On the contrary, when a researcher shows her results to a colleague she does not lose them but can thus improve them, correct errors and get new ideas. This is a positive sum game. Peer reviewing and publishing generalize such an exchange of results and ideas. This is why the output of research (*e.g.*, articles, data and codes) should belong to the *knowledge commons* one should collectively develop.

References

[1] Understanding Knowledge as a Commons: from Theory to Practice. Edited by Charlotte Hess and Elinor Ostrom, MIT Press, 2006

http://openscience.ens.fr/MARIE_FARGE

<http://barcelona.acadeuro.org>



CV Marie Farge

Marie Farge is Directrice de Recherche (DR1) at the *Centre National à la Recherche Scientifique* (CNRS) and she works at the *École Normale Supérieure* (ENS), Paris, in the *Laboratoire de Météorologie Dynamique* (LMD). She holds a Master of Science (Stanford University, 1977), a PhD in physics (Université Paris VII, 1980), a PhD in mathematics (Université Paris VI, 1987) and she did a postdoc at Harvard University. Her specialties are turbulence, partial differential equations, numerical simulation, harmonic analysis and statistical physics, that she uses to study aerodynamics, geophysical flows and plasma physics (in relation to the ITER program). She published more than 200 papers in peer-reviewed journals and proceedings, and she is still publishing. She taught at numerous universities (in Europe, Japan, Brazil, India, United States and China), and she is still teaching (in Korea, April 2017). She is fellow of the *American Physical Society* (APS), was visiting fellow of Trinity College in Cambridge and of the *Institute of Advanced Studies* in Berlin. She participated to the editorial board of three mathematical journals and cofounded ACHA (Applied and Computational Harmonic Analysis) in 1992. She was the 1993 winner of the Poncelet Prize of the French Academy of Sciences. She wrote in 2011 the recommendation of the *Ethics Committee of CNRS* on the relations between scientists and publishers. In 2012 she participated the redaction of the declaration *The Cost of Knowledge* calling for a boycott of *Elsevier* and a reform of the scientific publication system. In 2015 she cofounded the not-for-profit association CAPSH (Committee for the Accessibility of Publications in Sciences and Humanities) that develops the open source platform <http://dissem.in> to help researchers to deposit their articles in open access. She is member of the *Academia Europaea* (section of physics and engineering sciences) since 2005, of the expert group HERCuleS (Higher Education, Research and Culture in European Society), of RISE (Research, Innovation and Science policy Experts) of the European Commission, and of the Council of *Academia Europaea*.

Her list of publication can be downloaded from http://wavelets.ens.fr/PUBLICATIONS/pub_print.pdf or from the platform <http://dissem.in> (type 'Marie Farge'). A more detailed CV is on the site of *Academia Europaea* http://www.ae-info.org/ae/User/Farge_Marie/CV