## Scholarly publishing and peer-reviewing in Open Access

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I will present an article I wrote as member of RISE (Research Innovation and Science policy Experts). The European Commission published it in May 2017 as part of the book 'Europe's Future: Open Science, Open Innovation, and Open to the World'. The article can be downloaded from Zenodo (https://zenodo.org/record/1227093).

In this text, I argue that articles written and peer-reviewed by scholars should not be merchandises to trade, but knowledge commons to share with everyone and to preserve for future generations. Today, electronic publishing allows this change of paradigm, but most scientific publishers prefer to keep the business model of printing which benefits them.

I explain how the 'gold open access' model, for which publishers charge fees to publish in open access, is inadequate for researchers and should be replaced by the 'diamond open access' model, for which no fees are required, since researchers use the publishing platforms that funding agencies offer them as research infrastructures.

I then come up with the following recommendations:

- researchers should own the journals they create, for which they produce and peer-review the articles,

- researchers need publicly-owned and open source publishing platforms to publish their peer-reviewed articles,

- open peer-reviewing should be developed to improve the reproducibility of published results.

I conclude that researchers should get control of electronic publishing as soon as possible. In the meantime, the 'green open access' model (where one version of a published article can be downloaded from a repository for free) remains the best solution to guarantee a smooth transition towards open access for all scholarly publications.

Marie Farge is research director at CNRS-INSMI and works at ENS Paris since 1981. She has a MS from Stanford University (1977), a PhD in physics from Université Paris VII (1980) and a PhD in mathematics from Université Paris VI (1987). She studies turbulent flows of incompressible fluids and hot plasmas by direct numerical simulation and their applications in geophysics, nuclear fusion and aerodynamics of insect flight. In 1988 she pioneered the use of wavelets in fluid mechanics and participated in 1992 to the creation of the journal ACHA (Applied and Computational Harmonic Analysis). She has been member of the Ethics Committee of CNRS, of RISE (Research Innovation and Science Experts) of the European Commission and is member of the council of the Academia Europaea.