

## Report from the Electronic Publishing Committee June – October 2016

There was no meeting of the committee during the last five months. Our communication was on the level to e-mail exchanges and occasional meetings of individual members only. There were three activities in which members of the EPC were involved.

### *7ECM mini-symposium “Towards a Global Digital Mathematics Library”*

The mini-symposium was organized by Olaf Teschke (FIZ Karlsruhe, EPC) and Patrick Ion (American Mathematical Society) as part of the 7th European Congress of Mathematics on July 22, 2016. The mini-symposium consisted of four lectures:

Ingrid Daubechies, A personal perspective on the potential impact of the International Mathematical Knowledge Trust...

James Davenport, What does Mathematical Notation actually mean, and how can computers process it?

Jiří Rákosník, EuDML – a step on the road towards a GDML

Olaf Teschke, Semantics for Mathematics in the Framework of a Global Digital Mathematics Library

### *EMS/AMS panel discussion “The Future of Mathematical Publishing”*

Following the initiative of Pavel Exner, the President of the EMS, and Robert Bryant, the president of the American Mathematical Society, this panel discussion was organized by Jiří Rákosník, Olaf Teschke (EPC) and Charles Weibel (AMS) during the 7th European Congress of Mathematics on July 21, 2016. The five panelists, Harry Blom (Springer Nature, Mathematics, Computer Science and Publishing Development), Thierry Bouche (Université de Grenoble Alpes, Institut Fourier & Cellule Mathdoc; EuDML), Jean-Pierre Demailly (Université de Grenoble Alpes, Institut Fourier; Episciences-Maths), Sabrina Eck (FIZ Karlsruhe; ELibM), Sergei Gelfand (AMS Publisher) covered three core topics:

1. What constitutes mathematical publishing
2. Development of a sustainable publishing system
3. Long-term preservation of documentation

Notes from the panel discussion are attached to this report.

### *The European Digital Mathematics Library (EuDML)*

After a discussion between members of the EuDML Initiative Executive Board and of the EPC a proposal was submitted to the EMS EC to nominate Frédéric Hélein (Université Paris Diderot and Institut de Mathématiques de Jussieu – Paris Rive Gauche) the chair of the EuDML Scientific Advisory Board. The SAB now complete, for the whole SAB see <https://initiative.eudml.org/governing>.

The EuDML Initiative General Assembly met after the 7EMC on 23 July 2016 in Berlin. Three members of the EPC, Vittorio Coti Zelati, Jiří Rákosník, Olaf Teschke took part as representatives of the corresponding EuDML Initiative partners, Volker Mehrmann represented the EMS. The GA reviewed the current situation in the EuDML and set up a list of tasks for the next period including a tentative plan for inclusion of further collections.

In accordance with the statutes governing bodies have been elected for the next two-years period (see <https://initiative.eudml.org/governing>):

Executive Board: Thierry Bouche (chair), Aleksander Nowiński, Vittorio Coti Zelati, Jiří Rákosník, Olaf Teschke

Technical Committee: Aleksander Nowiński (chair), Michael Jost, Olivier Labbe, Petr Sojka, Volker Sorge

Patrick Ion (AMS) participated in the meeting as guest and informed the GA about the International Mathematical Knowledge Trust to be established within the next few months in

Canada with the aim to ease the way towards the foreseen Global Digital Mathematics Library. He mentioned two main directions – the existing EuDML representing a functional prototype of a DML with a critical volume, and the “semantic superstructure” which is less clear defined and will need much time before people get together to make a progress.

#### *zbMATH*

A regular column on zbMATH has been published in the EMS Newsletter. For further details see the zbMATH report already submitted by Klaus Hulek.

#### *eLibM*

Jiří Rákosník is working in the Scientific Advisory Board of the eLibM (Electronic Library of Mathematics) where currently a project funded by the DFG is carried out with the aim to build a publication platform for mathematical Open Access journals. Olaf Teschke serves as internal scientific and technical supervisor for the project on behalf of FIZ Karlsruhe, with a special focus on interoperability with EuDML and zbMATH.

#### *Encyclopaedia of Mathematics*

Thomas Unger continued his engagement in the Encyclopedia of Mathematics. Even though not directly connected with the EPC activities, we should mention that Ulf Rehmann published a report on the current state of the EoM in the June 2016 issue of the EMS Newsletter.

27 October 2016

Jiří Rákosník

Chair, Electronic Publishing Committee