Digitised Mathematics for the Working Mathematician

Klaus Hulek

Leibniz Universitaet Hannover

simone.balogh@fiz-karlsruhe.de

Mathematics has been both a driving force and a beneficiary of digitisation from the very beginning. Computers entered mathematical institutes early on, enabling previously unattainable calculations, and mathematical research literature was among the first to be made available electronically. Extensive collections of mathematical objects have been available electronically for decades. Platforms are widely used for collaborative work and for rapid dissemination and discussion of results.

The rapid development of digitised resources comes along with enormous benefits and challenges for the working mathematician: In an increasingly fragmented ecosystem, how do we ensure the completeness and reliability of mathematical knowledge essential for our research? We outline solutions that became feasible due to the recent success of Open Access/Open Data initiatives, and discuss which next steps might be the most useful to support the everyday work.