

Infrastructure for mathematical data

Katja Berčič

University of Ljubljana

`katja.bercic@fmf.uni-lj.si`

Producing and using data is becoming an increasingly useful part of doing mathematics. Unlike large projects, such as the OEIS or LMFDB, small projects have less (or zero) infrastructural support. Addressing this gap would be beneficial for the mathematical community, while following broader trends in research data, such as the FAIR principles. At the same time, improving the infrastructure for mathematical data has potential for synergy with proof assistants: on one hand, the proof assistants might be able to use mathematical databases as sources of concrete examples or counterexamples, on the other, the correctness of the data could be at least partially machine verified.