Mathematical Data wants to be Deep FAIR

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Over the last years the publication and management of research data have gained increasing attention and support. There are large research data initiatives at the national (e.g. NFDI; Germany) and European level (e.g. EOSC and EUDATA). Even though there are large data mathematical collections like the OEIS, LMFDB, GAP small groups library, or the House of Graphs, by and large Mathematicians are unaware and unaffected by the whole trend. This talk discusses notions of mathematical data, their role in mathematical practice, and their inter-dependence with mathematical knowledge and proof. Based on this we discuss what it would take to make mathematical (research) data FAIR. We will present a paradigm for establishing a unified data infrastructure, and building mathematical services on this.