What Makes a Mathematician Tick?

Kevin Buzzard

Imperial College, London, U.K. k.buzzard@imperial.ac.uk

— Abstract -

Formalised mathematics has a serious image problem in mathematics departments. Mathematicians working in "mainstream" areas such as modern algebra, analysis, geometry etc have absolutely no desire to work formally, it slows them down and they cannot see the point. The mathematical community has its own methods for deciding whether a proof (in pdf format) is correct or not; these methods rely on the views of a cabal of experts – our high priests. Our proof of the odd order theorem is "John Thompson got a Fields Medal for the work". This proof is of a rather different nature to the formalised proof of Gonthier et al. Our methods are arcane and mysterious; there is also ample evidence that they are, in general, extremely accurate when it comes to the important stuff.

I will talk about my attempts, as a "mainstream mathematician", to introduce formalised mathematics to my community.

2012 ACM Subject Classification Mathematics of computing

Keywords and phrases Formalization of mathematics

Digital Object Identifier 10.4230/LIPIcs.ITP.2019.2

Category Invited Talk