

Proof, Rigour and Mathematical Virtues

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In this talk I will be investigating the application of virtue epistemology to specifically mathematical knowledge. I shall argue the case that this provides us with the tools to account for informal proofs and the nature of rigour as they are found in mathematical practice, overcoming obstacles that rule out the opposing formalist-reductionist approach. I will finish with a case study of the ongoing difficulties with verifying the correctness of Mochizuki's proof of the abc conjecture, and suggest that mathematical virtues and vices are playing a central role in the controversy.