

# Crafting the mathematical machine

Ursula Martin

Oxford

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My recent research uses the on-line collaborative proofs developed in the polymath initiative, led by Gowers and Tao, for an empirical study of mathematical collaboration. While the original motivation for the work was to extend the support offered by computer aided proof, in this talk I will outline some of the results about mathematical practice obtained in by working with social scientists, philosophers and computer scientists. I will focusing in particular on ideas of craft and landscape that are emerging in studying the proof process.

The project is supported by EPSRC and collaborators include Andrew Aberdein (Florida), Joe Corneli (Edinburgh), Chris Hollings (Oxford) Lorenzo Lane (Oxford) Laura Meagher (Edinburgh), Alison Pease (Dundee) and Fenner Tanswell (Oxford).

Recent papers can be found at [www.cs.ox.ac.uk/people/ursula.martin/](http://www.cs.ox.ac.uk/people/ursula.martin/)