School of Mathematics and Statistics





2024 PhD Projects

Project title Finding community: Women and Mathematics, 1700–1950

Principal supervisor Dr. Brigitte Stenhouse

Second supervisor Prof. June Barrow-Green

Discipline History of Mathematics

Research area/ keywords History of Mathematics, Society, Women

Suitable for Full time applicants, Part time applicants

Project background and description

Mathematics is an intensely collaborative discipline, sustained by international networks including not least funding bodies, universities, academic publications, and learned societies. These networks and communities have varied greatly over time, and exerted a significant influence on the direction and content of mathematical research. However, the access granted to these mathematical spaces has not been equitable or equal for people of differing gender, social class, or race.

In this project, we will use archival research to investigate the ways in which women forged careers in mathematics between 1700 and 1950. We will focus on how women embedded themselves and their work within the wider mathematical communities of which they were a part. This could include exploring women's access to education, the methods used to circulate their work, and the varying opportunities for paid employment.

Students will be expected to identify relevant archival materials to consult, locate published and/or digitized primary source material, and develop and apply tools of historical analysis to these sources.

Background reading/references

- E. Kaufholz-Soldat, N. M. R. Oswald (eds), *Against All Odds: Women's ways to Mathematical Research Since 1800*, Springer, 2020.
- B. Stenhouse, 'Mister Mary Somerville: Husband and Secretary', *The Mathematical Intelligencer*, Vol 43 (1), Pg 7-18.
 https://link.springer.com/article/10.1007/s00283-020-09998-6.
- C. G. Jones, Femininity, Mathematics and Science, 1880–1914. Palgrave Macmillan, 2009.
- D. L. Opitz, S. Bergwik, and B. Van Tiggelen (eds.), *Domesticity in the Making of Modern Science*. Palgrave Macmillan, 2016.