

FERM@T

Fundamental Education Research in Mathematics at Twente

Tracy Craig, EEMCS Networking Day 2024

What is FERMAT?

- ▶ FERMAT is a new (2024) research group in the Department of Applied Mathematics, focussed on research in mathematics education. The group's aims are threefold
 - ▶ carry out research on educational issues of importance to teachers in the department.
 - ▶ have impact on the educational environment of the department.
 - ▶ help form a hub for the community of scholarly teachers of mathematics.

Who is in FERMAT?

- ▶ Tracy Craig (UHD)
 - ▶ Fulya Kula (UD)
 - ▶ Lerna Pehlivan
 - ▶ (beginning 2025) Lavinia Lanting
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- ▶ We work on projects with colleagues within the maths department and outside it.

Projects

- ▶ Self-regulation in vector calculus (Tracy + team)
- ▶ Double integrals: an APOS analysis (Tracy + Lerna)
- ▶ The mathematics bridging course (Fulya + team)
- ▶ Visualisation in multivariable calculus (Lerna)
- ▶ Mathematics and Didactics Synthesis - proposed course; winner BIG 2024 (Tracy + Fulya)
- ▶ (beginning 2025) Automated and alternative assessment in mathematics (Lavinia)

The mathematics education reading group

- ▶ Active since 2019
- ▶ Currently meeting monthly
- ▶ Readings drawn from a selection of mathematics education journals
- ▶ Membership: Mathematics educators in AM, ELAN and ATLAS

Collaborations welcome

- ▶ EEMCS - how can we work together?