



# ZeMKI-Forschungskolloquium

### **ZeMKI Research Seminar**

Linzer Str. 4, Room 60.070, 28359 Bremen, DE

19.11.2025, 16.15 - 17.45 (CET)

## Dr. Andrew Whelan

(University of Wollongong, Australia)

Flowchart: towards histories of the algorithm at work

#### Abstract:

This colloquium presents research towards a social history of algorithms in the workplace. This research investigates how earlier media of process visualisation and rationalisation—specifically, flowcharts—presage contemporary algorithmic automation. The current focus is on two case studies: the emergence of the flowchart in scientific management (1920s), and flowcharts in military computer programming (1940s). Repositioning algorithms as workplace media, rather than novel technological interventions, redirects attention to the organisational imperatives leading to algorithmic automation. This in turn links critical orientations to algorithms back to classic sociological concerns about bureaucracy ('government by desk') and administrative delegation to media. I argue that these case studies invite consideration of whether workplace stewardship and democratic oversight might be preferable to technocratic policy fixes in addressing the issues associated with algorithmic decision-making.

#### Bio:

Andrew Whelan is a senior lecturer in Sociology at the University of Wollongong in New South Wales, Australia. He has research interests in the political and social implications of automated decision-making and algorithmic governance for our understandings of public administration, organization and bureaucracy. He is a 2025 Fellow at the Hanse-Wissenschaftskolleg in Delmenhorst, and the author of *Destruction of Documents*, forthcoming with MIT Press (2026).