V. N. KARAZIN KHARKIV NATIONAL UNIVERSITY

universität ulm

# Fall School 2026

## Topological Data Analysis: From Persistent Homology to Mapper

### 5–9 October 2026

Dr. Barbara Mez-Starck-Haus · Ulm University

**For Master's students, PhD students, and PostDocs in Mathematics, Computer Science, and related fields.**

Basic Python recommended · No prior topology required · Language: English

Discover how topology reveals structure in complex data. Combine mathematical foundations with Python-based practice, build Mapper graphs, and complete a reproducible team TDA project.

### Programme highlights

- Mathematical foundations
- Python-based practice
- Mapper framework
- Team project & presentation

### At a glance

**5** intensive days

**4** expert lecturers

Lectures + Python sessions

Team project + final presentation

### Lecturers

V. Chernyshev · I. Limonchenko

O. Leonov · L. Poliakova

### Applications are open

**Apply by 31 August 2026**

**Scan for the full programme and application details**

Within the DAAD-supported Double-Degree Programme Ulm–Kharkiv.

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service