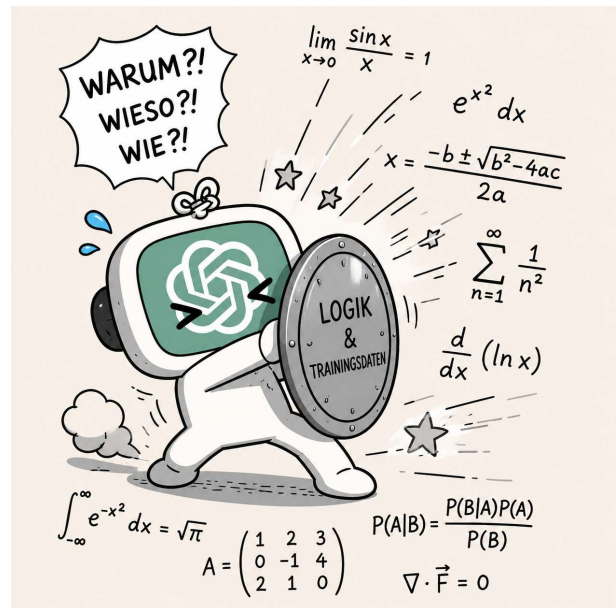


Putting ChatGPT to Serious Use in Real Analysis

Winter term 2026/27

Lecture Wednesday 12:00–14:00



Dozent:

Prof. Dr. Georg Sebastian Weiss

As the use of LLMs in Mathematical Research is increasing fast, I feel we should address this development somewhere.

In the past six months we have used ChatGPT extensively in potential analysis, more specifically in the analysis of singular integrals, and we have gathered a lot of material.

In this course I will report on the ongoing experience of using ChatGPT in Research. We will see that ChatGPT has grown extremely smart in certain techniques while it is still really dumb using other (partly very simple) operations.

Language:

English or German (depending on the participants)

Voraussetzungen / Prerequisites:

Although the application of our research is in the asymptotic behavior and singularities of non-linear partial differential equations, most of the research we will deal with in the course are in potential analysis, one-dimensional singular integrals and systems of ordinary differential equations, so for most of the course the knowledge of Analysis 1-2 should be sufficient.