

Ressourcenadaptive Kognitive Prozesse

MI3: DIALOG Natural Language-Based Interaction with a **Mathematics Assistance System**



Project MI 3 — DIALOG — Pinkal, Siekmann, Benzmüller, Kruijff-Korbayová

Project Summary (and Collaboration)

The goal of the DIALOG project is to develop a tutoring system for mathematics, supporting natural tutorial dialog with a student. The goal will be realized through:

- advanced solutions for the analysis of semiformal mathema tical input,
- flexible tutorial dialog management,
- cognitively oriented mathematical domain reasoning.

The research in the first phase involved:

- empirical studies (*WOz* experiment, annotations),
- formal modeling of the relevant components,
- implementation of a first demonstrator.

In the second phase, we will concentrate on:

- robust linguistic analysis for processing informal input,



 evaluation of proof contributions with respect to soundness, completeness, and relevance, • ambiguity processing using a combination of discourse and domain knowledge.

Researchers

University Funding

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DFG Funding

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Project Presentation

Building 43.8, DFKI, Room Barwise

Status in the SFB 378

Continuation of Project MI3 DIALOG

