



## Einladung zum wissenschaftlichen Kolloquium des IDMI

## Irene Ferrando

(University of Valencia, Spain)

## Research on cognitive aspects in the solving process of Fermi problems

This talk will present the results of some research developed in recent years in relation to Fermi problems. Fermi problems are real context problems that require solvers to make assumptions about a situation and estimate relevant quantities before undertaking often simple computations. In particular, we will focus on the description of the design and the results of research based on the analysis of the written solutions of sequences of Fermi problems by secondary school students and pre-service teachers. The research developed relates to key aspects of problem solving such as: influence of context, flexibility, adaptability and performance.

Bio

Irene Ferrando is a professor in Mathematics Education at the Department of Mathematics Didactic in University of Valencia. She teaches the subject of *Mathematics for Teachers* in the undergraduate studies of Primary Education Teacher Training, and also teaches in the postgraduate studies in the Research in Didactics program and in the training program for future secondary education teachers. She is the president of the Education Commission of the Spanish Royal Mathematical Society and she is actively involved in different initiatives related to the use of modelling in the teaching of mathematics. Within the field of research in mathematics education, her work focuses on studies on cognitive aspects during the process of solving modelling tasks, although she has also collaborated in research focused on teachers and on the influence of affective aspects in problem solving.

Dienstag, den 6. Dezember, um 16 Uhr c.t. im Raum 29, Henriette-Son-Str. 19, 48149 Münster

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