Einladung

Würzburger Mathematisches Kolloquium

Julius-Maximilians-Universität Würzburg • Institut für Mathematik

Zehavit Kohen

Technion, Israel

Mathematical Modelling in STEM-related Contexts

Dienstag, 21. Juni 2022 • 14:15 Uhr

Seminarraum SE40 • Mathematik Ost (Emil-Fischer-Straße 40, 97074 Würzburg)

Der Vortrag wird auch Zoom-Meeting übertragen: go.uniwue.de/ifmcolloquium-zoom

Abstract. Contemporary 21st-century skills require new ways of teaching mathematics to prepare students for the changing world, in which there is a high demand for excellent STEM (Science, Technology, Engineering and Mathematics) professionals. The skills required of excellent mathematical problem-solvers are not taught by teachers in the context of professional tasks, so students do not gain the experience and understanding of applied mathematics as it is used in STEM workplaces. Furthermore, high-school students often lack motivation to study mathematics, as they struggle to understand its relevance to the world around them. In this talk, I will review the structure of the Israeli Educational System, focusing specifically on STEM Education in Israel and the choice of and retention in STEM for study and career and its relation to studying advanced mathematics in high-school. I will then describe my current research on the integration of Hi-Tech related authentic problems in secondary school math teaching. The research focuses on the design and integration of i-MAT (Integrated Math & Technology) materials in professional communities of leading teachers and of teachers who integrate these materials in their classes, as well as the effect on students' learning.

Alle sind herzlich eingeladen.

Die Dozentinnen und Dozenten der Mathematik