



Einladung zum wissenschaftlichen Kolloquium des IDMI

## Xiaoli Lu

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## **Exploring Creativity in Mathematical Modelling**

This lecture explores the integration of mathematical creativity and mathematical modelling, extending on Lu and Kaiser's (2022a, 2022b) framework. We redefine the three previously identified elements of creativity (fluency, usefulness, and originality) in mathematical modelling and introduce new assessment methods. The lecture then illustrates the implementation of the refined construct to assess participants' creative abilities in modelling activities with empirical data in China. The results revealed significant variations in creativity levels across tasks and between groups, highlighting the importance of pedagogical strategies that promote and assess creativity in modelling education.

## Bio

Dr. Xiaoli Lu, an Associate Professor and Doctoral Supervisor at the School of Mathematical Sciences, East China Normal University, holds a Ph.D. in Mathematics Education from the University of Hong Kong. Her extensive academic contributions include roles in the Shanghai Key Laboratory of Mathematics and Practical Mathematics, and the "Nurturing Virtue and Cultivating Talents" Mathematics Education Teaching Base in Shanghai. Dr. Lu serves as the Academic Secretary of the Chinese Society of Mathematics Education. Her research focuses on mathematical modelling, mathematics teacher education, and curriculum reform in China. She has authored numerous publications in esteemed national and international journals, including an academic monograph published by Springer, and has led and contributed to various projects funded by the Chinese Ministry of Education.

Mittwoch, den 4. September, um 11 Uhr c.t. Henriette-Son-Str. 19, 48149 Münster

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