

**Morten Misfeld, Aalborg University, Copenhagen, Denmark**

**Teaching mathematics with reasoning tools: learning, teaching and curriculum planning.**

Computer Algebra Systems and other digital technologies supporting mathematical reasoning are being implemented in educational situations all over the world. The transformational nature of these technologies is large but the educational value is unclear, and results vary from very promising to problematic. In the talk, I will question which challenges and possibilities the adoption of mathematical reasoning tools pose to the teaching, learning and curricular planning of mathematics. What are the potential and actual changes in the nature of the school topic of mathematics, and how should we as mathematicians, mathematics teachers, and researchers in mathematics education, respond to these challenges?