



UNIVERSITY OF LUXEMBOURG
Educational Measurement and
Applied Cognitive Science (EMACS)



5th Expert meeting on Mathematical Thinking and Learning

9h30 – 9h50 Registrations, Coffee and Welcome

9h50 – 10h00 Introduction

10h00 – 11h00 **Keynote Lecture - Karin Landerl (UniGraz)**

Core deficit and individual manifestations of developmental dyscalculia: the role of comorbidity

11h00 – 12h45 **Paper presentation I - Development of numerical and mathematical cognition**

- Knowledge of multiplicative relations before being taught (Majorke Bakker et al., Freudenthal Institute UU)
- The role of interference in arithmetic facts storage (Alice De Visscher et al., UCL)
- Strategy flexibility on multi-digit subtractions (Joke Torbeyns et al., KUL)
- The influence of experiencing success in math on math anxiety, perceived math competence, and math performance (Brenda Jansen et al., UvA)
- The role of working memory in numerical development Evelyn (Kroesbergen et al., UU)

12h45 – 14h30 **Lunch and Poster session**

- ➔ 12h45 – 13h30 Lunch
- ➔ 13h30 – 14h30 Poster session

14h30 – 15h30 **Keynote Lecture – Roi Cohen Kadosh (Oxford University)**

Enhancing the mathematical brain

15h30 -16h50 **Paper presentation II - Neuronal correlates of numerical and mathematical cognition**

- Functional and neural overlap between finger movements and arithmetic operations (Michael Andres et al., UGent, UCL)
- Procedural and magnitude-based strategies in solving complex additions (Guillaume Mathieu et al., ULB)
- Do the mental number line and spatial sequence synesthesia share neural substrates? (Nina Bien et al., UL, UM)
- A multitude of cognitive components related to developmental dyscalculia (Wim Fias, UGent)

16h50 – 18h30 **Poster session**

19h - ... **Conference dinner at the “Alfa Brasserie” (Luxembourg)**