Day 3: Tuesday June 18

8:00 am – 9:00 am: MCLS Business Meeting [everyone welcome to attend]

9:00 - 10:05 Symposia session 7

S19	EarlyMathSkills174.5	**Early numerical and non-numerical abilities and their relation with mathematical education** 1: Wei Wei, Zhejiang University, China 2: Sara Caviola, University of Leeds 3: Tali Leibovich-Raveh, University of Haifa 4: Krzysztof Cipora, University of Tuebingen, Tuebingen,
S20	MathematicalDiscourse29.1	**Mathematical discourse - The symbols we use to communicate mathematical ideas** 1: Sarah Powell, University of Texas 2: Heather Douglas, Carleton University 3: Erica Zippert, Vanderbilt University 4: Discussant: M. Gail Headley, University of Delaware
S21	MathLearning53.1	**From the math lab to the math class: can we improve math learning by targeting specific cognitive mechanisms?** 1: Flávia H. Santos, University College Dublin 2: Ipek Saralar, University of Nottingham 3: Ann Dowker, Oxford University, England 4: Dror Dotan, Tel Aviv University, Israel

10:25 - 11:30 Symposia session 8

S22	EarlyMathSkills193.6	**Early Mathematical Screening Tools: Bridging the Research-Practice Gap** 1: Marcie Penner, King's University College at Western University 2: Brianna Devlin, University of Delaware 3: Stephanie Bugden, University of Pennsylvania 4: Rebecca Merkley, Carleton University
S23	MathLearning156.6	**Unpacking Manipulatives: Recommendations for the Mathematics Classroom** Chair: Helena Osana, Concordia University 1: Anne Lafay, Concordia University 2: Andrea M. Donovan, University of Wisconsin—Madison 3: Emmanuelle Adrien, Concordia University Discussant: Martha W. Alibali, University of Wisconsin—Madison
S24	MathAndLanguage164.3	**Cognitive Underpinnings of Mathematics versus Reading Skills: Similarities and Differences** 1: Tuire Koponen, University of Jyväskylä, Finland 2: Xiujie Yang, Chinese University of Hong Kong 3: Xiao Zhang, The University of Hong Kong Discussants: Kiran Vanbinst & Lien Peters

11:50 - 1:30 pm: Lunch + Poster session (P4) - see next page

1:40 - 2:45 Symposia session 9

S25	MathLearning154.5	**What I Can Bring to my Math Classroom: Putting Numeracy Research to Work** Chair: Helena Osana, Concordia University 1: Martha W. Alibali, University of Wisconsin—Madison 2: Sarah Powell, University of Texas at Austin 3: Nancy C. Jordan, University of Delaware 4: Tracy Solomon, Hospital for Sick Children
S26	EarlyMathAssessment 232.1	**A variety of early grade mathematics assessments and their uses in South Africa** 1: Hanrie Bezuidenhout & Elizabeth Henning, University of Johannesburg, South Africa 2: Ingrid Mostert, University of Johannesburg, South Africa 3: Lara Ragpot, Trinity Western University & Caroline Fitzpatrick, Université Sainte-Anne 4: Ingrid Mostert, University of Johannesburg, South Africa
S27	MathAndLanguage151.2	**Linguistic influences on early numerical development** 1: Mojtaba Soltanlou, University of Tuebingen, Tuebingen 2: Krzysztof Cipora, University of Tuebingen, Tuebingen, Germany 3: Jacob Paul, Utrecht University, Utrecht, Netherlands 4: Victoria Simms, Ulster University, Northern Ireland 5: Thomas Gallagher-Mitchell, Liverpool Hope University

3:10 – 4:15 Symposia session 10

S28	MathAndTechnology79.1	**Is touch screen technology a double-edged sword in mathematics education?** 1: Joanne Lee, Developmental Psychology, Department of Psychology Wilfrid Laurier University 2: Adam K. Dubé, Learning Sciences, McGill University 3: Marjorie W. Schaeffer, Department of Psychology, University of Chicago Discussant: Erin Maloney, School of Psychology, University of Ottawa
S29	EarlyMathSkills43.2	**Early symbolic numerical skills: theoretical and educational implications.** 1: Francesco Sella, University of Sheffield, UK 2: Rose M. Schneider, University of California, San Diego, USA 3: Camilla Gilmore, Loughborough University, UK 4: Silke M. Göbel, University of York, UK
S30	MathLearning75.3	**Understanding the Factors Affecting Mathematics Development and Supporting Children Through Home and School Interventions** Chair: Sheri-Lynn Skwarchuk, University of Winnipeg, Canada 1: Maureen Vandermaas-Peeler, Elon University, 2: Sarah Melo, Faculty of Education, University of Manitoba

		3: Prentice Starkey, WestEd, San Francisco, California 4: Jalisha Braxton, University of Chicago, Chicago, Illinois, USA

Poster Session Schedule:

P4	**Tuesday June 18th - 11:50 - 1:30**		
105	The Contributions Of Cognitive, Numeracy, And Motivational Factors For Middle Childhood Math Performance		Allison Liu
106	Individual And Developmental Differences In The Neurocognitive Integration Of Number Notations And Their Relation To Math Competence	(P)	Darren Yeo
107	Reverse Distance Effects Do Not Exist		Eli Zaleznik
108	Learning Under Pressure: Impacts Of Stereotype Threat Vs. Incentives On Conceptual Math Learning		Emily Lyons
109	Symbols Are Special: An Fmri Adaptation Study Of Symbolic, Nonsymbolic And Non-Numerical Magnitude Processing In The Human Brain		H Moriah Sokolowski
110	Mathematics Anxiety, Achievement, And Teacher Influences In A Developing Nation		Elayne Teska
111	Impact Of Association, Interference, And Priming On Math Story Problems		Jill Turner
112	Math Anxiety Changes In Response To Math Learning, Task, And Difficulty		Kelly Trezise
113	Do School Psychologists Believe They Know Enough Mathematics?		Kelsey Gould
114	The Role Of The Base-10 System In Processing Magnitudes Using The Number Line Estimation Task	(P)	Kelsey J. Mackay
115	The Effect Of Formal Math Instruction On Research Findings: A Cross-Educational Study	(P)	Kiran Vanbinst
116	Number Accuracy And Arithmetic In Two Children With Mathematics Learning Disabilities After A Computerized Number Line Intervention		Laetitia Marcon
117	Inducing A Mathematical Formula Buffers Against Overgeneralization		Lauren N. Sprague
118	Gender Differences In Math And Spatial Anxiety And Self-Concept In Early Elementary School		Lindsey Hildebrand
119	Bias Towards Fraction Components And Math Achievement In Low-Income College Students		Linsah Coulanges
120	How Chilean Children's And Parents' Beliefs About Who Does Math Influence Math Learning		M. Francisca Del Rio
121	Fingers Dexterity Predicts Early Math Skills Development: Insight From 3D Human Motion Analyses		Maëlle Neveu

122	Parent And Child Spontaneous Focus On Number And Mathematical Talk During Play Activities	(P)	Mary Depascale
123	Flexible Attention To Numerical And Spatial Magnitudes In Early Childhood		Mary Fuhs
124	Neural Correlates For The Outcome Of Spaced Versus Massed Learning In Arithmetic		Mengyi Li
125	Exploring Differences In Domain-Specific And Domain-General Abilities Between Mathematicians And Non-Mathematicians.	(P)	Michaela A. Meier
126	Abacus Training Decreases The Prevalence Of Developmental Dyscalculia In China		Yujie Lu
127	One, Two, Three, What? Investigating The Distance Effect In Sequential Number Processing: A P300 Study	(P)	Nathaniel Shannon
128	The Relation Between Math-Talk And Math-Gestures For Parent-Child Dyads		Raychel Gordon
129	Fingers Come In Handy: Does Finger Use Support Learning A Pseudo-Number-Word Sequence?	(P)	Roberta Barrocas
130	Measuring Preschool Children's Affective Attitudes Towards Mathematics		Xiao Zhang
131	Effects Of A Non-Symbolic Fraction Intervention On Proportional Reasoning	(P)	Roberto A. Abreu-Mendoza
132	Sex Differences In Early Executive Function Components Vary By Measurement Type		Sammy Ahmed
133	Measuring The Quality Of Parent-Child Interactions And The Relation To Preschool-Aged Children’s Math Skills		Shirley Duong
134	Linguistic Influences On Number Line Estimation: Digit Identity And Inversion Effects		Sophie Savelkouls
135	Word-Problem Solving In English Language Learners		Stephanie Hadden
136	Rules Of Order: Evidence For A Fundamental Bias When Processing The Ordinality Of Numbers		Sylvia Gattas
137	Enhancing Multi-Digit Number Knowledge Through Number Board Games		Winnie Wai Lan Chan
138	Assessing Math Performance Errors In Young Girls: Considering Age, Race And Self-Efficacy When Designing Math Interventions		Yvette Harris
139	Intelligence Mediates The Relationship Between Exact Arithmetic And Verbal Working Memory		Zhang Tingyan

Note: P = Pre-registration poster