

The origins of numerical abilities: the future

22-23 February 2017

Organised by Professor Brian Butterworth FBA, Professor Charles Gallistel and Professor Giorgio Vallortigara

THE
ROYAL
SOCIETY

DAY 1			
SESSION 1: Genetics of numerical abilities Chair: Stanislas Dehaene		SESSION 2: Neural implementation of numerical abilities Chair: Andreas Nieder	
09.30	Welcome by the Royal Society and Giorgio Vallortigara		
09.45	Caroline Brennan How can zebrafish be used to explore the evolution and genetics of numerosity?	14.00	Marinella Cappelletti The power of brain plasticity: insights from the number brain
10.15	Silvia Paracchini The genetics of mathematical abilities: lessons learnt from genetic studies of literacy and language	14.30	Christopher Clark New tools from neuroimaging for measuring brain microstructure and connectivity: relevance to learning and mathematical cognition
10.45	Coffee	15.00	Tea
11.00	Carlo Semenza Reassessing lateralisation in calculation	15.30	Teresa Iuculano Neural correlates of numerical learning in the typical and atypical developing brain
11.30	Discussion	16.00	Margarete Delazer Learning and numerical competence after brain damage
12.00	Short talks		
13.00	LUNCH	16.30	Discussion
		17.00	Poster session
		18.00	CLOSE

DAY 2**SESSION 3: Limits of numerical abilities**

Chair: Rosa Rugani

SESSION 4: The perception, symbolisation and education

Chair: Tetsuro Matsuzawa

09.30	Angelo Bisazza Numerical abilities of teleost fishes: future research directions	14.00	Marco Zorzi Talk title TBC
10.00	TBC	14.30	Robert Reeve Perceptions of number in Anindilyakwa-speaking Australian Aboriginal children: evidence of a universal cognitive prerequisite for early arithmetic
10.30	Coffee	15.00	Tea
11.00	Fuat Balci Counting and numerical decision-making in mice: new data and future directions	15.30	Barbara Sarnecka The real preschoolers of Orange County, and their numerical abilities
11.30	David Burr The perception of numerosity, and texture density, and their relationship to mathematical abilities	16.00	Diana Laurillard Learning number sense from adaptive digital games
12.00	Discussion	16.30	Discussion
12.30	LUNCH	17.00	CLOSE

Draft programme – correct as of 17 January 2017