

The origins of numerical abilities

20-21 February 2017

Scientific discussion meeting organised by Professor Brian Butterworth FBA, Professor Charles Gallistel and Professor Giorgio Vallortigara

DAY 1			
SESSION 1: The adaptive value of numerical abilities			
09.00	Welcome by the Royal Society & Brian Butterworth		
09.05	Charles Gallistel The brain's representation of quantity	13.30	Christian Agrillo Numerical abilities in fish
09.50	Sarah Benson-Amram Numerical assessment in the wild: insights from social carnivores and other mammals	14.15	Gary Rose Auditory neurons that count
10.35	Coffee	15.00	Lars Chittka Is counting difficult? Lessons from the insects
11.00	Rosa Rugani Minds without language process number magnitudes: from numerical cognition toward spatial numerical association		
11.45	Elizabeth Brannon Harnessing our primitive number sense to improve mathematical abilities	15.45	Tea
11.45		16.00	Giorgio Vallortigara Talk title TBC
12.30	LUNCH	16.45	CLOSE

DAY 2

SESSION 2: The numerical abilities of primates		SESSION 3: Numerical abilities, symbolism, education and mathematics	
09.00	Tetsuro Matsuzawa Numerical abilities of chimpanzees	13.10	Francesco d'Errico Talk title TBC
09.45	Stanislas Dehaene Brain-imaging studies of the relationship between language and mathematics	13.55	Mark Pagel FRS The deep history of counting words
10.30	Coffee	14.40	Marcus Giaquinto The philosophical significance of the cognitive origins of numerical abilities
10.45	Number representations in the convergently evolved endbrains of primates and corvid birds	15.25	Tea
		15.45	Brian Butterworth Talk title TBC
11.30	Rochel Gelman Principle before Skill or Skill before Principle? Both	16.20	Marcus du Sautoy FRS Cédric Villani
12.15	LUNCH	17.00	CLOSE

Draft programme – correct as of 1 November 2016