

# 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			
<b>SESSION 1: The adaptive value of numerical abilities</b>			
<b>09.00</b>	Welcome by the Royal Society & Brian Butterworth		
<b>09.05</b>	<b>Charles Gallistel</b> The brain's representation of quantity	<b>13.30</b>	<b>Christian Agrillo</b> Talk title TBC
<b>09.50</b>	<b>Sarah Benson-Amram</b> Numerical assessment in the wild: insights from social carnivores and other mammals	<b>14.15</b>	<b>Gary Rose</b> Auditory neurons that count
<b>10.35</b>	Coffee		
<b>11.00</b>	<b>TBC</b>	<b>15.00</b>	<b>Lars Chittka</b> Is counting difficult? Lessons from the insects
		<b>15.45</b>	Tea
<b>11.45</b>	<b>Elizabeth Brannon</b> Harnessing our primitive number sense to improve mathematical abilities	<b>16.00</b>	<b>Giorgio Vallortigara</b> Talk title TBC
<b>12.30</b>	LUNCH	<b>16.45</b>	CLOSE

**DAY 2**

<b>SESSION 2: The numerical abilities of primates</b>		<b>SESSION 3: Numerical abilities, symbolism, education and mathematics</b>	
<b>09.00</b>	<b>TBC</b>	<b>13.15</b>	<b>Francesco d'Errico</b> Talk title TBC
<b>09.45</b>	<b>Stanislas Dehaene</b> Brain-imaging studies of the relationship between language and mathematics	<b>14.00</b>	<b>Mark Pagel FRS</b> The deep history of counting words
<b>10.30</b>	Coffee	<b>14.45</b>	<b>Marcus Giaquinto</b> The philosophical significance of the cognitive origins of numerical abilities
<b>10.45</b>	<b>Andreas Nieder</b> Number representations in the convergently evolved endbrains of primates and corvid birds	<b>15.30</b>	Tea
		<b>16.00</b>	<b>Brian Butterworth</b> Talk title TBC
<b>11.30</b>	<b>Rochel Gelman</b> Principle before skill or skill before principle? Both	<b>16.45</b>	<b>Ian Stewart FRS</b> Implications for mathematics and mathematicians
<b>12.15</b>	LUNCH	<b>17.00</b>	CLOSE

*Draft programme – correct as of 25 May 2016*