

## Psychology Colloquia 2016-17

- Friday, 7 October, 2016: Prof Wouter Poortinga (Cardiff)  
Title: Plastic bag charges, habit disruption, and behavioural spillover  
Psychology, [12.11](#), 14:10-15:00  
Host: Prof Lorraine Whitmarsh
- Friday, 14 October, 2016: Prof Dominic Dwyer (Cardiff)  
Title: Affective responses in rodents: basic and applied science  
Psychology, [LT3](#), 14:10-15:00  
Host: Prof Rob Honey
- Friday, 21 October, 2016: Dr Tom Lancaster (Cardiff)  
Title: Towards an understanding of the brain's valuation system in health and disease  
Psychology, [12.11](#), 14:10-15:00  
Host: Prof David Linden
- Friday, 4 November, 2016: Prof Stephan Lewandowsky (Bristol)  
Title: Rational denial of undeniable climate change  
Psychology, [12.11](#), 14:10-15:00  
Host: Dr Lewis Bott
- Friday, 11 November, 2016: Dr Travis Proulx (Cardiff)  
Title: The meaning maintenance model  
Psychology, [12.11](#), 14:10-15:00
- Friday, 18 November, 2016: Prof Lisa Woolfson (Strathclyde, Glasgow)  
Title: Development, disability, and disadvantage  
Psychology, [12.11](#), 14:10-15:00  
Host: Prof Merideth Gattis
- Friday, 25 November, 2016: Dr Maria Wimber (Birmingham)  
Title: Temporal dynamics of memory retrieval  
Abstract: Our memories are not static. Each attempt to retrieve a past event can adaptively change the underlying memory space. Here I discuss my work on the neurocognitive mechanisms that enable the selective retrieval of episodic memories. I present behavioural and electrophysiological (M/EEG) work that provides insight into how the retrieval process unfolds in time, on a sub-trial scale. Further, I show evidence from a series of fMRI studies in which we track the representational changes that occur in a memory trace over time and across repeated retrievals. The findings demonstrate that retrieval adaptively modifies memories by strengthening behaviourally relevant and weakening behaviourally irrelevant, interfering components. Together, this work sheds light onto the neural dynamics of the retrieval process, and informs theories of adaptive memory.  
Psychology, [12.11](#), 14:10-15:00  
Host: Dr Jiaxiang Zhang

Friday, 2 December, 2016: Prof Enrique Alejandro López Poveda (Salamanca)  
Title: What the brain tells the ears at a cocktail party  
Psychology, **12.11**, 14:10-15:00  
Host: Prof John Culling

Friday, 9 December, 2016: Prof Anthony David (London)  
Title: Insight and Cognitive Neuropsychiatry  
Psychology, **12.11**, 14:10-15:00  
Host: Clara Humpston

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Friday, 27 January, 2016: Dr Martin Caminada (Cardiff, Computer Sciences)  
Title: A Logical Analysis of Dishonesty  
Abstract: Dishonesty can come in different forms. In order to precisely pinpoint what are the different types of dishonesty, we provide a formal (mathematical) logic in which to describe these. We first provide two different definitions of lies and provide their logical properties. We then consider the incentives behind the act of lying and introduce lying with objectives. We subsequently define bullshit, withholding information and half-truths, analyse their formal properties, and describe how they differ from each other. We also propose maxims for dishonest communication that either humans or AI agents should try to satisfy. Apart from clearly describing things, we also examine some of the incentives for dishonesty in a simulated social setting.  
Psychology, **12.11**, 14:10-15:00  
Host: Prof Wouter Poortinga

Friday, 3 February, 2016: Prof Tony Charman (London)  
Title: Getting answers from babies about autism  
Abstract: Until recently, most of what we knew about the emergence of autism in infancy relied on retrospective accounts. A new approach, the study of infants at familial risk, aims to identify the earliest “pure” manifestations of autism, before subsequent years of atypical development exacerbate, or compensate for, initial perturbations. A decade of study has revealed some surprising findings – in particular a challenge to ‘social first’ theories of autism atypicality. Instead, an emerging picture from these studies is that early impairments in one or more functional cognitive systems are associated with familial risk and a later autism diagnosis. Understanding the temporal associations between these impairments over time will reveal the underlying mechanisms of atypical development in autism and inform approaches to early intervention.  
Psychology, **LT3**, 14:10-15:00  
Host: Prof Sue Leekam

Friday, 10 February, 2016: Prof Sophie Scott (London)  
Title: The science of laughter - from evolution to neuroscience  
Abstract: Starting from work in basic emotional expressions, I will discuss the case of laughter, a widespread non verbal expression of

emotion, which has not been widely studied in psychology or neuroscience. I'll discuss the evolution and development of laughter and its neurobiology and role in emotion regulation. I will outline its social importance, and show some empirical notes on conditions where laughter processing can be disrupted.

Psychology, [12.11](#), 14:10-15:00

Host: Prof Dale Hay

Friday, 17 February, 2016:

Prof Karl Gegenfurtner (Giessen, Germany)

Title: The Interaction Between Vision and Eye Movements

Abstract: The existence of a central fovea, the small retinal region with high analytical performance, is arguably the most prominent design feature of the primate visual system. This centralization comes along with the corresponding capability to move the eyes to reposition the fovea continuously. Past research on visual perception was mainly concerned with foveal vision while the observers kept their eyes stationary. Research on the role of eye movements in visual perception emphasized their negative aspects, for example, the active suppression of vision before and during the execution of saccades. But is the only benefit of our precise eye movement system to provide high acuity of the small foveal region, at the cost of retinal blur during their execution? In this review, I will compare human visual perception with and without saccadic and smooth pursuit eye movements to emphasize different aspects and functions of eye movements. I will show that the interaction between eye movements and visual perception is optimized for the active sampling of information across the visual field and for the calibration of different parts of the visual field. The movements of our eyes and visual information uptake are intricately intertwined. The two processes interact to enable an optimal perception of the world, one that we cannot fully grasp by doing experiments where observers are fixating a small spot on a display.

Psychology, [12.11](#), 14:10-15:00

Host: Prof Tom Freeman

Friday, 3 March, 2016:

Prof Penny Lewis (Cardiff)

Title: Sleep, consolidation, and semantic memory formation

Psychology, [12.11](#), 14:10-15:00

Friday, 10 March, 2016:

Dr Françoise Vitu (Marseilles, France)

Title: The mindless moving eyes: A novel, universal, account of eye guidance in cognitive tasks

Abstract: Saccades are the very brief movements of our eyes that bring poorly resolved peripheral input onto the center of our retinas for detailed visual analysis. Crucial for reading and seeing, they have long been thought to be intended movements towards the center of peripherally selected words/objects of interest, and hence to reflect ongoing cognitive processes. During my talk, I will first review behavioral and neural evidence against this long-standing hypothesis. I will then present new behavioral and neuro-computational data revealing that basic oculomotor principles combined with rudimentary visual extraction processes can predict

where the eyes move in a range of tasks, and in particular during sentence reading and the free viewing of natural scenes. I will then discuss how top-down cognitive processes may intervene on top of default, low-level, visuo-motor mechanisms to influence oculomotor behavior.

Psychology, [12.11](#), 14:10-15:00

Host: Dr Aline Bompas

- Friday, 17 March, 2016: Prof Marc Buehner (Cardiff)  
Title: The perception of time and causality - mutual constraints  
Psychology, [12.11](#), 14:10-15:00  
Host: John Pearce
- Friday, 24 March, 2016: Professor Verity Brown (st Andrews)  
Title:  
Psychology, [12.11](#), 14:10-15:00  
Host: Prof Rob Honey
- Friday, 31 March, 2016: Dr Janet Bultitude (Bath)  
Title:  
Psychology, [12.11](#), 14:10-15:00  
Host: Dr Aline Bompas
- Friday, 7 April, 2016: Dr John Anderson  
Title: Stress and anxiety reduction using Virtual Reality  
Psychology, [12.11](#), 14:10-15:00  
Host: John Aggleton
- Friday, 5 May, 2016: Dr Sarah Gerson (Cardiff)  
Title: Action, Interaction, and Learning in Infants and Young Children (TBC)  
Psychology, [12.11](#), 14:10-15:00  
Host: Prof Merideth Gattis
- Friday, 12 May, 2016: Dr Daniel Lakens (Eindhoven, the Netherlands)  
Title: Designing Efficient and Informative Studies  
Psychology, [12.11](#), 14:10-15:00  
Host: Dr Richard Morey
- Friday, 19 May, 2016:  
Title:  
Psychology, [12.11](#), 14:10-15:00  
Host:
- Friday, 26 May, 2016:  
Title:  
Psychology, [12.11](#), 14:10-15:00  
Host:

**Talks will be followed by a tea and cake reception in room 12.10 (except on 12/05, 12.01).**