

Bonn Melbourne Seminar in Decision Making and Computational Psychiatry

Predictive Neural Representations in Vision and Language

Prof Floris de Lange (Donders Institute for Brain, Cognition and Behavior, Nijmegen, Netherlands)

Abstract

We live in a largely predictable world. Capitalizing on this structure allows us to predict events and agents around us. The ability to predict future input is potentially useful for more efficient encoding, learning and recognition of input, and therefore appears a crucial skill. In my talk, I will discuss recent studies from my lab, investigating behavior and brain activity, in which we are trying to elucidate the nature of predictive processing. I will argue that the brain represents a temporally discounted representation of future expected states. This representational format may lead to an efficient neural processing of expected input, and directs information sampling to situations of maximal uncertainty and surprise. I will illustrate this principle in the realm of visual perception and natural language understanding.

Thursday, 2nd February 2023, 9am (CET)

<https://uni-bonn.zoom.us/j/99726851020?pwd=ZHRpaDQrZ2YzYnFmUE51eitkMjZiZz09>

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Contact

Prof Ulrich Ettinger, Department of Psychology, University of Bonn, Germany; ulrich.ettinger@uni-bonn.de

Prof Carsten Murawski, Department of Finance, The University of Melbourne, Australia;
carstenm@unimelb.edu.au

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