

Klink et al., 2017, Neuron 95, 2009-220

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Klink et al. probed interactions between visual cortical areas V1 and V4 with electrical microstimulation.

- ➔ Microstimulation effects reliably propagated in the feedforward direction.
- ➔ In the feedback direction they depend on visual stimulation and figure-ground segregation.
- ➔ Results reveal driving and modulatory roles of feedforward and feedback connections

Distinct Feedforward and Feedback Effects of Microstimulation in Visual Cortex Reveal Neural Mechanisms of Texture Segregation

P. Christiaan Klink,^{1,2,3,4,5} Bruno Dagnino,^{1,5} Marie-Alice Gariel-Mathis,^{1,5} and Pieter R. Roelfsema^{1,3,4,6,*}
¹Department of Vision and Cognition, Netherlands Institute for Neuroscience, Meibergdreef 47, 1105 BA, Amsterdam, the Netherlands
²Department of Neuromodulation and Behaviour, Netherlands Institute for Neuroscience, Meibergdreef 47, 1105 BA, Amsterdam, the Netherlands
³Department of Psychiatry, Academic Medical Center, University of Amsterdam, 1100 DD Amsterdam, the Netherlands
⁴Department of Integrative Neurophysiology, Center for Neurogenomics and Cognitive Research, VU University, 1081 HV Amsterdam, the Netherlands
⁵These authors contributed equally
⁶Lead Contact
*Correspondence: p.roelfsema@nin.knaw.nl
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HBP Highlight

SP2



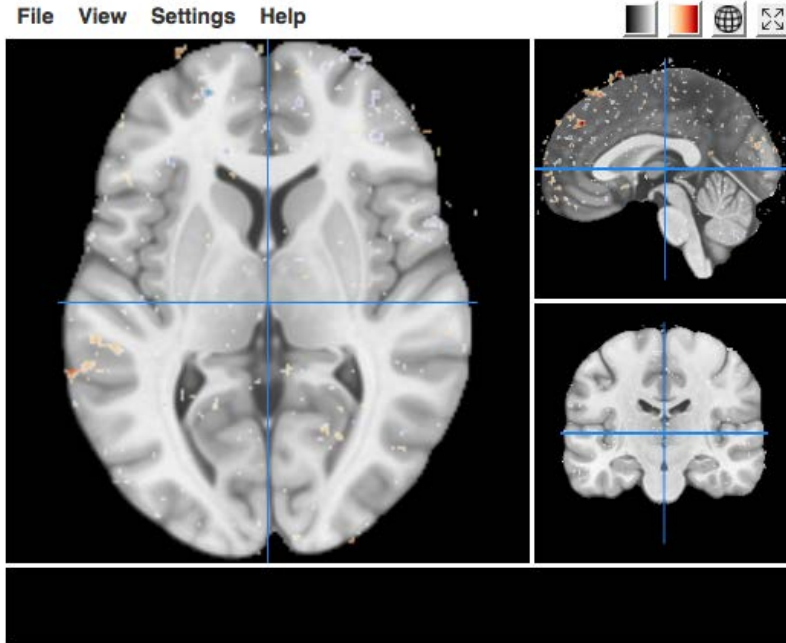
Picture: CEA

Largest and most powerful MRI magnet in the world

<http://www.cea.fr/english/Pages/News/voyage-aimant-IRM-projet-iseult.aspx>

- magn. Field: 11.7 T, mass: 130 t, length: 5m, diameter: 5m, installed at CEA Saclay, an HBP members institution
- core component of most powerful MRI scanner
- will allow for MRI images of ultra-high resolution





Picture: <http://neurovault.org/collections/2138>

Release of first batch of more than 500 brain images on NeuroVault

<http://neurovault.org/collections/2138>

- Thiron et al., January 2017
- high-resolution images (1.5mm) represent activations of 12 subjects of IBC cohort for first set of functional contrasts
- first step towards normative dataset that will be basis of brain atlas based on cognitive representations

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Best practices in data analysis and sharing in neuroimaging using MRI

Thomas E Nichols¹, Samir Das^{2,3}, Simon B Eickhoff^{4,5}, Alan C Evans^{2,3}, Tristan Glatard^{2,6}, Michael Hanke^{7,8}, Nikolaus Kriegeskorte⁹, Michael P Milham^{10,11}, Russell A Poldrack¹², Jean-Baptiste Poline¹³, Erika Proal¹⁴, Bertrand Thirion¹⁵, David C Van Essen¹⁶, Tonya White¹⁷ & B T Thomas Yeo¹⁸

Given concerns about the reproducibility of scientific findings, neuroimaging must define best practices for data analysis, results reporting, and algorithm and data sharing to promote transparency, reliability and collaboration. We describe insights from developing a set of recommendations on behalf of the Organization for Human Brain Mapping and identify barriers that impede these practices, including how the discipline must change to fully exploit the potential of the world's neuroimaging data.