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Research Master in Cognitive and Clinical Neuroscience

Specialisation Neuroeconomics

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Associate Professor

Specialisation coordinator

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Neuroeconomics seeks to understand and explain (puzzling) everyday behaviour.

So many choices.

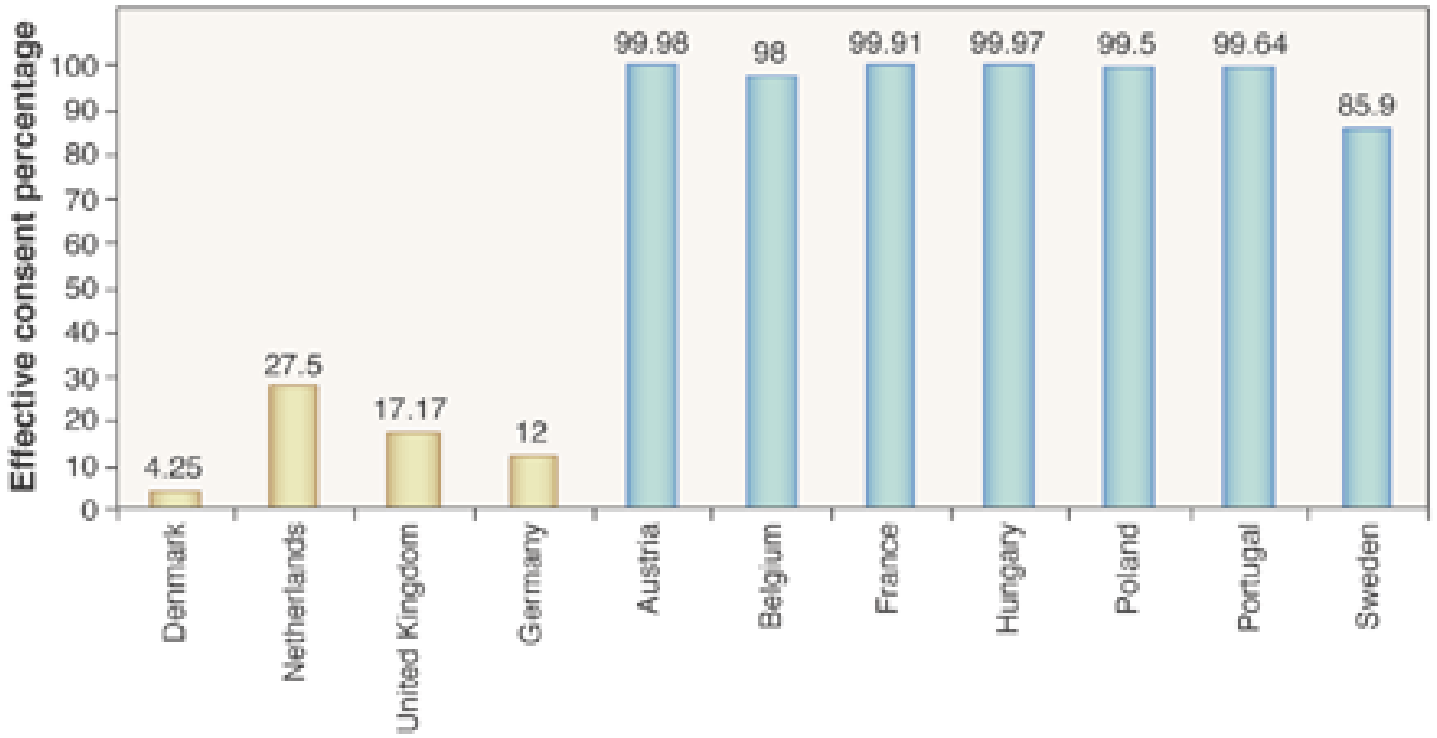
What is a good and a bad choice?

How do we choose?

Neuroeconomics seeks to understand and explain (puzzling) everyday behaviour.

The power of defaults.

Organ donation rates in different countries.



Neuroeconomics seeks to understand and explain (puzzling) everyday behaviour

- Why are people gambling and taking insurance at the same time?

Neuroeconomics seeks to understand and explain (puzzling) everyday behaviour

- What makes us humans greedy and cooperative at the same time?

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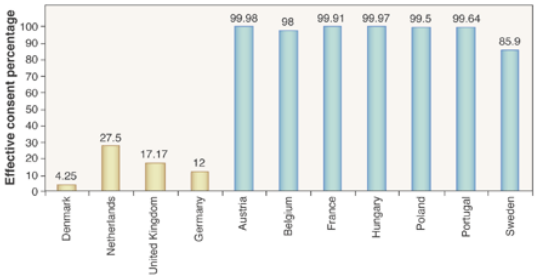
Neuroeconomics seeks to understand and explain (puzzling) everyday behaviour.

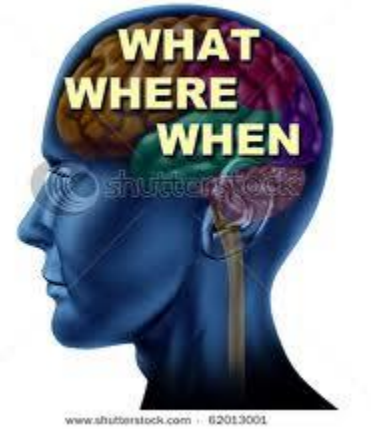


How does this all fit together?

Neuroeconomics is an interdisciplinary endeavour

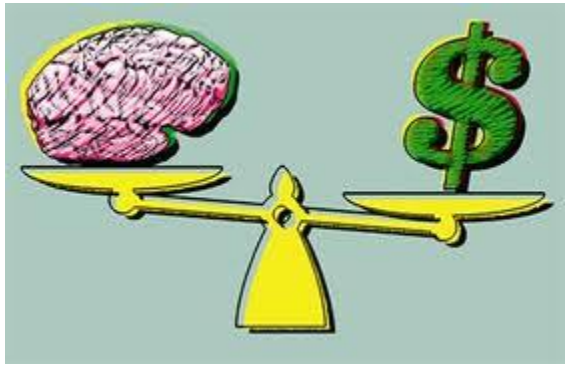
Neuroeconomics adds the brain to economics.

- Neuroeconomics seeks to uncover the neuronal basis of our choices and behaviour.

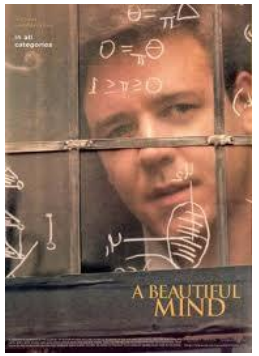


Neuroeconomics adds economics to neuroscience.

- Neuroeconomics looks at the brain as a system using limited resources.



Tools and methods from economics, neuroscience, and psychology

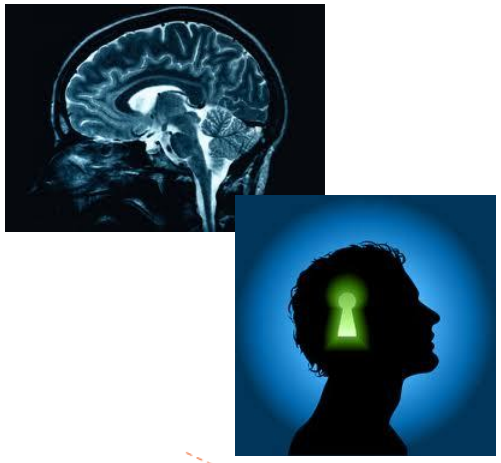


Economics and Game Theory

Use the formal language of economics and game theory to model and predict behaviour.

Economics Experiments

Use incentivised experiments without deception to explore behaviour.



Neuroscience

Use methods from neuroscience to measure and explore neural processes underlying behaviour.

Psychology

Use insights from psychology (illusions, heuristics, framing effects) to improve models of behaviour.

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The Neuroeconomics Curriculum.

Jointly offered by FPN and SBE, with courses at both faculties/schools!

The curriculum:

A. Behaviour and Mind (at SBE at FPN)

B. Neuroscientific Methods (at FPN)

C. Research Skills (at FPN and SBE)

D. Research (at FPN and SBE)

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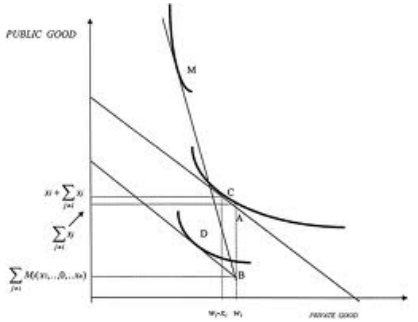
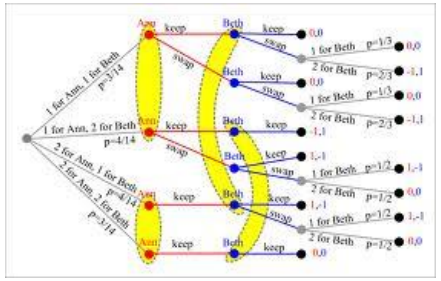
Behaviour and mind

Psychology ~ Neuroscience ~ Economics



Decision & Equilibrium Theory



Game Theory & Information

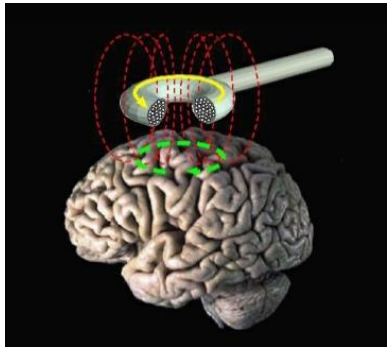
Social Neuroscience

Behavioural Economics

Neuroscientific methods

Imaging (fMRI)

Electroencephalography (EEG)
Magnetoencephalography (MEG)



Transcranial Brain Stimulation (TMS)

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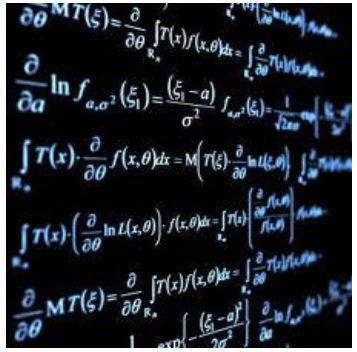
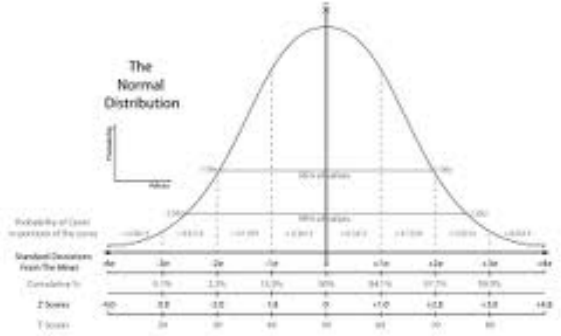
Research skills



Mathematical Research Tools



Advanced Statistics

MATLAB & Brain Voyager

Experimental Economics Methods

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Your own research

- **Almost the whole second year is dedicated to research**
- **Research Internship and Master Thesis**
  - **In Maastricht:** Excellent multidisciplinary research groups at FPN and SBE.
  - **Abroad:** 19% of students did internship at Top 10 universities from Times Higher Education ranking (CalTech, Cambridge, MIT, Oxford)
  - **Topics:** Range from individual decisions to social behavior.
  - **Methods:** Range from behavioural research to fMRI, TMS, …

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Career focus

- **Optimal basis for fundamental and applied research in decision making:**
  - PhD careers at economics, psychology, or neuroscience departments

- **Excellent preparation for career in the private sector:**
  - Consultant and advisor at institutions and organisations
  - Data scientist

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More information? Questions?

- Meet us at the information market:
  - Maike Brandt (1st year student)
  - Matthias Wibral (me, track coordinator)
  - m.wibral@maastrichtuniversity.nl
- Visit our Research Master website or www.neuroeconomics.nl

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#UMMOD19 #ExplorePsychology