# Table of Contents

## 1 Spotlight
- 1.1 First Meeting of the Advisory Board of the Department of Economics
- 1.2 Information Brochure

## 2 Events
- 2.1 Guest Presentations
- 2.2 Short Courses
- 2.3 Alumni Events

## 3 Publications
- 3.1 In Economics
- 3.2 Others
- 3.3 Books & Book Chapters
- 3.4 Working Papers
- 3.5 Mainstream Publications & Appearances

## 4 People
- 4.1 Visiting Guests & Research Stays
- 4.2 Degrees
- 4.3 Awards

## 5 Miscellaneous
- 5.1 Congresses, Conferences & Selected Presentations
- 5.2 Grants
1 Spotlight

1.1 First Meeting of the Advisory Board of the Department of Economics

On May 11, twelve members of the new Advisory Board for the Department of Economics met for the first time in the Senate Room at the University of Zurich. Professors Ernst Fehr and Fabrizio Zilibotti presented two lectures on "Children's Skills and Human Welfare" and "China's Economic Growth in the XXIst Century" at the beginning of the meeting. This was the introduction for an interesting discussion of the future strategy and development of the Department of Economics. The second part of the meeting was dedicated to the Excellence Foundation Zurich. The board will meet in the future twice a year.

1.2 Information Brochure

We are pleased to announce the publication of our information brochure in which we present our department to the public. On its thirty pages you will find information about a variety of topics, including our academic profile, our different research areas, and our excellent infrastructure. It is one way to enhance our visibility and to become a «top of mind» European Department of Economics.

Altogether, 1’500 copies will be printed. Hard copy versions will be sent to selected recipients in mid-June. Furthermore, an electronic version of the brochure will be available for downloading.

2 Events

2.1 Guest Presentations

<table>
<thead>
<tr>
<th>date</th>
<th>schedule</th>
<th>title</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed, Jun 22</td>
<td>16.15-17.45</td>
<td>Stefano Della Vigna, UC Berkeley</td>
<td>RAI-G-041</td>
</tr>
<tr>
<td></td>
<td></td>
<td>«Unintended media effects in a conflict environment: Serbian radio and Croatian nationalism»</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macro-Finance-Labor Seminar</td>
<td></td>
</tr>
<tr>
<td>Fri, Jul 8</td>
<td>12.00-13.00</td>
<td>Martijn Figee, Academic Medical Center, University of Amsterdam</td>
<td>BLU-E-003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>«The reward circuitry in obsessive-compulsive disorder»</td>
<td></td>
</tr>
</tbody>
</table>
2.2 Short Courses

<table>
<thead>
<tr>
<th>date</th>
<th>schedule</th>
<th>title</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri, Jun 3</td>
<td>09.15-17.10</td>
<td>Workshop on Communication in Games, organized by J. Goeree and J. Zhang, various speakers</td>
<td>BLU-E-003</td>
</tr>
<tr>
<td>Sat, Jun 4</td>
<td>09.30-16.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tue, Jun 14</td>
<td>14.00-17.00</td>
<td>Stefano DellaVigna and Ulrike Malmendier, UC Berkeley and NBER</td>
<td>tba</td>
</tr>
<tr>
<td>Thu, Jun 16</td>
<td>14.00-15.45</td>
<td>«Behavioral Economics and Behavioral Finance»</td>
<td></td>
</tr>
<tr>
<td>Tue, Jun 21</td>
<td>14.00-17.00</td>
<td>Doctoral Program in Economics</td>
<td></td>
</tr>
<tr>
<td>Thu, Jun 23</td>
<td>14.00-15.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tue, Jun 28</td>
<td>10.00-12.00</td>
<td>James Malley, University of Glasgow</td>
<td>ZUH-E-004</td>
</tr>
<tr>
<td></td>
<td>14.00-16.00</td>
<td>«Fiscal policy in dynamic general equilibrium models»</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(For more information please contact Prof. Woitek)</td>
<td></td>
</tr>
</tbody>
</table>

2.3 Alumni Events

<table>
<thead>
<tr>
<th>date</th>
<th>schedule</th>
<th>title</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tue, Jun 28</td>
<td>12.00-14.00</td>
<td>Nick Begligner, President swisscleantech and CEO of Foundation for Global Sustainability «Cleantech als Chance für den Wirtschaftsstandort Schweiz»</td>
<td>Zunfhaus zur Meisen Münsterhof 20 8001 Zürich</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OEC ALUMNI UZH-Lunch</td>
<td></td>
</tr>
<tr>
<td>Thu, Aug 25</td>
<td>12.00-14.00</td>
<td>Dr. Thomas Moser, Deputy Board Member of the Swiss National Bank «Der Stellenwert der internationalen Beziehungen für die schweizerische Geldpolitik»</td>
<td>Zunfhaus zur Meisen Münsterhof 20 8001 Zürich</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OEC ALUMNI UZH-Lunch</td>
<td></td>
</tr>
</tbody>
</table>

3 Publications

3.1 In Economics


We propose a direct measure of altruism between parents and adult children, using survey data on happiness from the German Socio-Economic Panel for the years 2000-2004. The question of altruism within families has policy relevance, for example, to understand whether public transfers crowd out private ones. Previous empirical evidence, based on observed transfer behavior, has failed to establish a clear consensus. Using various cross section, panel data, and instrumental
variable estimators, we find a robust association between the happiness of parents and that of their adult children. A 1 standard deviation increase in a child’s happiness is associated with the same increase in own happiness as that of a 20-45% increase in household income, depending on specification.


Policy makers in several industrial countries are seeking to limit the rise in health care cost growth by supporting coordinated or integrated care programs, which differ from most prevailing forms of medical organization in how physicians are paid and how they work in groups. However, as long as fee-for-service payment systems remain an option, general practitioners will be reluctant to embrace coordinated care because it would give them less autonomy in how they practice. A study in Switzerland indicates that general practitioners will require a pay increase of up to 40 percent before they are willing to accept coordinated care, and a similar study found that Swiss consumers wanted a substantial reduction in premiums to accept it. These findings suggest that provisions of US health care reform designed to encourage the growth of coordinated care—such as accountable care organizations and medical homes—may face a challenging future.

3.2 Others


Conventional decoding methods in neuroscience aim to predict discrete brain states from multivariate correlates of neural activity. This approach faces two important challenges. First, a small number of examples are typically represented by a much larger number of features, making it hard to select the few informative features that allow for accurate predictions. Second, accuracy estimates and information maps often remain descriptive and can be hard to interpret. In this paper, we propose a model-based decoding approach that addresses both challenges from a new angle. Our method involves (i) inverting a dynamic causal model of neurophysiological data in a trial-by-trial fashion; (ii) training and testing a discriminative classifier on a strongly reduced feature space derived from trial-wise estimates of the model parameters; and (iii) reconstructing the separating hyperplane. Since the approach is model-based, it provides a principled dimensionality reduction of the feature space; in addition, if the model is neurobiologically plausible, decoding results may offer a mechanistically meaningful interpretation. The proposed method can be used in conjunction with a variety of modelling approaches and brain data, and supports decoding of either trial or subject labels. Moreover, it can supplement evidence-based approaches for model-based decoding and enable structural model selection in cases where Bayesian model selection cannot be applied. Here, we illustrate its application using dynamic causal modelling (DCM) of electrophysiological recordings in rodents. We demonstrate that the approach achieves significant above-chance performance and, at the same time, allows for a neurobiological interpretation of the results.


This paper is about inferring or discovering the functional architecture of distributed systems using Dynamic Causal Modelling (DCM). We describe a scheme that recovers the (dynamic) Bayesian dependency graph (connections in a network) using observed network activity. This network discovery uses Bayesian model selection to identify the sparsity structure (absence of edges or
connections) in a graph that best explains observed time-series. The implicit adjacency matrix specifies the form of the network (e.g., cyclic or acyclic) and its graph-theoretical attributes (e.g., degree distribution). The scheme is illustrated using functional magnetic resonance imaging (fMRI) time series to discover functional brain networks. Crucially, it can be applied to experimentally evoked responses (activation studies) or endogenous activity in task-free (resting state) fMRI studies. Unlike conventional approaches to network discovery, DCM permits the analysis of directed and cyclic graphs. Furthermore, it eschews (implausible) Markovian assumptions about the serial independence of random fluctuations. The scheme furnishes a network description of distributed activity in the brain that is optimal in the sense of having the greatest conditional probability, relative to other networks. The networks are characterised in terms of their connectivity or adjacency matrices and conditional distributions over the directed (and reciprocal) effective connectivity between connected nodes or regions. We envisage that this approach will provide a useful complement to current analyses of functional connectivity for both activation and resting-state studies.

*Gerits, Annelies; *Ruff, Christian C.; Guipponi, Olivier; Wenderoth, Nicole; Driver, Jon & Vanduffel, Wim (2011). «Transcranial magnetic stimulation of macaque frontal eye fields decreases saccadic reaction time», Experimental brain research. [2011 May 5, Epub ahead of print]  
http://dx.doi.org/10.1007/s00221-011-2710-3

Transcranial magnetic stimulation (TMS) is increasingly used to perturb targeted human brain sites non-invasively, to test for causal effects on performance of cognitive tasks. TMS might also be used in non-human primates to complement invasive work and compare with human studies. Here, we targeted the frontal eye fields (FEF) in two macaques with a continuous theta-burst (cTBS) protocol, testing the impact on visually guided saccades. After unilateral cTBS over the FEF in either hemisphere, a small (mean 7 ms) but highly consistent decrease in saccadic reaction times (RTs) was observed. Lower latencies arose for saccades both contra- and ipsilateral to the stimulated FEF after cTBS. These results provide the first demonstration that TMS can be used to affect saccadic behavior in non-human primates. The unexpectedly bilateral impact on RTs may reflect an impact on ‘fixation’ neurons in the FEF and/or transcallosal modulation of both FEFs induced by unilateral cTBS. In either case, this study demonstrates a clear behavioral effect induced by TMS in awake behaving monkeys performing a cognitive task. This opens new opportunities for investigating the causal roles of targeted brain areas in behavior, for measuring physiological consequences of TMS in the primate brain, and ultimately for human-monkey comparisons.

http://dx.doi.org/10.1016/j.neuron.2011.02.054

The dominant view that perceptual learning is accompanied by changes in early sensory representations has recently been challenged. Here we tested the idea that perceptual learning can be accounted for by reinforcement learning involving changes in higher decision-making areas. We trained subjects on an orientation discrimination task involving feedback over 4 days, acquiring fMRI data on the first and last day. Behavioral improvements were well explained by a reinforcement learning model in which learning leads to enhanced readout of sensory information, thereby establishing noise-robust representations of decision variables. We find stimulus orientation encoded in early visual and higher cortical regions such as lateral parietal cortex and anterior cingulate cortex (ACC). However, only activity patterns in the ACC tracked changes in decision variables during learning. These results provide strong evidence for perceptual learning-related changes in higher order areas and suggest that perceptual and reward learning are based on a common neurobiological mechanism.

Computational learning models are critical for understanding mechanisms of adaptive behavior. However, the two major current frameworks, reinforcement learning (RL) and Bayesian learning, both have certain limitations. For example, many Bayesian models are agnostic of inter-individual variability and involve complicated integrals, making online learning difficult. Here, we introduce a generic hierarchical Bayesian framework for individual learning under multiple forms of uncertainty (e.g., environmental volatility and perceptual uncertainty). The model assumes Gaussian random walks of states at all but the first level, with the step size determined by the next highest level. The coupling between levels is controlled by parameters that shape the influence of uncertainty on learning in a subject-specific fashion. Using variational Bayes under a mean-field approximation and a novel approximation to the posterior energy function, we derive trial-by-trial update equations which (i) are analytical and extremely efficient, enabling real-time learning, (ii) have a natural interpretation in terms of RL, and (iii) contain parameters representing processes which play a key role in current theories of learning, e.g., precision-weighting of prediction error. These parameters allow for the expression of individual differences in learning and may relate to specific neuromodulatory mechanisms in the brain. Our model is very general: it can deal with both discrete and continuous states and equally accounts for deterministic and probabilistic relations between environmental events and perceptual states (i.e., situations with and without perceptual uncertainty). These properties are illustrated by simulations and analyses of empirical time series. Overall, our framework provides a novel foundation for understanding normal and pathological learning that contextualizes RL within a generic Bayesian scheme and thus connects it to principles of optimality from probability theory.


In 1835, Edouard Mallet published a notable but today nearly forgotten study of the average height of Genevan conscripts. His individual data included 3029 conscripts born between 1805 and 1814, examined and measured between 1826 and 1835. Mallet’s work was only the third auxological study to be based on a large sample of individual conscript data, the other two being those of Louis-René Villermé and Adolphe Quételet, but as far as we know Mallet’s was the first to note the law of normal distribution. Like Villermé and Quételet, Mallet explained urban/rural and international differences in average height strictly in terms of environmental and economic determinants. In the recent past, references to Mallet’s work have been rare, and limited to citations of his computed averages. We postulate that Mallet and his study deserve greater consideration for their contribution to the field of anthropometric history than they have yet received.

3.3 Books & Book Chapters


3.4 Working Papers


3.5 Mainstream Publications & Appearances


4 People

4.1 Visiting Guests & Research Stays

PROF. RUFF
Apr 11-14 Brad Postle, University of Wisconsin at Madison

PROF. SCHMUTZLER
Jun 20-23 Konrad Stahl, University of Mannheim
PROF. WINKELMANN
Jul 1 – Dec 16  Luke Connelly, University of Queensland

PROF. WOITEK
Jun 24-29  James Malley, University of Glasgow

PROF. ZILIBOTTI
Jun 20-24  Gino Gancia, Universitat Pompeu Fabra

4.2 Degrees

DOCTORAL THESSES


Holger Herz (Prof. Fehr). April 2011. Subject: «Essays in Organizational and Personnel Economics»


MASTER THESSES


Dominik Studer (Prof. Woitek). April 2011. Subject: «Die Schweizer Geldpolitik in der Zwischenkriegszeit»

Kinga Szanto (Prof. Frey). April 2011. Subject: «Fine Art Insurance in Museums Insuring Temporary Art Exhibitions»


BACHELOR THESSES

Manuel Langhart (Prof. Woitek). April 2011. Subject: «Das Verbrechen von 1873»

Stefanie Nussbaumer (Prof. Schmutzler). March 2011. Subject: «Preissetzungsstrategien für die Einführung neuer Produkte»
4.3 Awards

**Ernst Fehr** was accorded the Vorarlberger Wissenschaftspreis (Science Prize of the State of Vorarlberg, Austria) on April 11, 2011.

**Malena Schulz** was awarded the Semesterpreis for her Bachelor Thesis written under the supervision of Prof. Hoffmann. Congratulations!

**Peter Zweifel** was appointed Honorary Professor in Health Economics at the Faculty of Social Sciences, University of Southern Denmark, for the years 2011-2016.

5 Miscellaneous

5.1 Congresses, Conferences & Selected Presentations

**Ernst Fehr** presented the Bernoulli Lecture for the Behavioral Sciences on «Die Rolle von Eigennutz und Gemeinnutz in Wirtschaft und Gesellschaft» at the University of Basel on April 14, 2011.


The chair of **Mathias Hoffmann** is hosting the annual meeting of the standing committee on macroeconomics (Makroökonomischer Ausschuss) of the German Economic Association (Verein für Socialpolitik) on June 24-25. The list of speakers will include Michael J. Burda, Michael Binder, Michael Funke, Nicola Fuchs-Schündeln, Leo Kaas, Klaus Neusser and Uwe Sunde.


5.2 Grants

**Robertas Zubrickas** (Prof. Ewerhart) received a grant from the University of Zurich for the project «Agency Relationships with Asymmetric Transfer Values».

Newsletter 49 will appear on September 15, 2011

---

**PUBLISHING INFORMATION**

Editor: Department of Economics
Editorial work: Cornelia Metzler
Periodicity: 6 editions per year
Contact: newsletter@econ.uzh.ch
Download: http://www.econ.uzh.ch/agenda/newsletter.html

---

Newsletter 48  June 2, 2011  8