



Fachbereich VWL / Department of Economics

# EconNewsletter

Editorial Contact: Michael Paetz  
tel: +49 40 42838-5561; e-mail: econ.newsletter.Wiso@uni-hamburg.de

JANUARY 21 – JANUARY 25, 2019

NEWSLETTER 2019-3

## SEMINAR CALENDAR

### Research Seminar “Labour Economics”

Toman Barsbai, University of St. Andrews:  
*The geographical origins of human preferences:  
Evidence from animal behavior*

Monday January 21  
16:30-18:00  
Esplanade 36, R. 4011/13

### Forschungsseminar “Quantitative Wirtschaftsforschung“

Andreas Joseph, Bank of England:  
*Shapley regressions: A universal framework for statistical inference  
on machine learning models*

Tuesday January 22  
12:15–13:45  
R. 2095/2197 (VMP 5)

### Environmental and Development Economics

Corbett Grainger, University of Wisconsin:  
*Do Regulators Strategically Avoid Pollution Hotspots when Siting  
Monitors? Evidence from Remote Sensing of Air Pollution*

Wednesday January 23  
12:15–13:45  
Zentralbib. Recht, Rothen-  
baumchaussee 33, BG 3/4

### Hamburg Lectures on Law & Economics

Dr. Anastasia Litina, University of Ioannina:  
*Immigrant Political Trust Unraveled*

Wednesday January 23  
18:15–19:45  
R. 1083a (VMP 5)

### PhD Seminar

Silke Sturm, Universität Hamburg:  
*Political Competition: How to Measure Party Strategy in Direct Voter  
Communication?*

Thursday January 24  
12:15–13:15  
R. 2091/2201 (VMP 5)

### Research Seminar “Microeconomics”

Karine Nyborg, University of Oslo:  
*Humans in the Perfectly Competitive Market: Report from a Fictional  
Field Study*

Thursday January 24  
17:15–18:45  
Allende Platz 1, Raum 250

Sollten Sie Interesse haben, sich mit einem/r der Vortragenden zu treffen, wenden Sie sich bitte an den entsprechenden Veranstalter. Weitere Infos finden Sie auf unserer Homepage: <https://www.wiso.uni-hamburg.de/fachbereich-vwl/forschung/forschungsseminare.html>

## HCHE Research Seminar

- no seminar -

### ABSTRACTS

#### **Forschungsseminar “Quantitative Wirtschaftsforschung“**

Andreas Joseph, Bank of England:

*Internet and Protests Shapley regressions: A universal framework for statistical inference on machine learning models*

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*Abstract:*

Machine learning models often excel in the accuracy of their predictions but are opaque due to their non-linear and non-parametric structure. This makes statistical inference challenging and disqualifies them for many applications where model interpretability is crucial. In this paper, I propose the Shapley regression framework as an approach for statistical inference on any (non-linear or non-parametric) model. Inference is performed based on the Shapley value decomposition of a model, a pay-off concept from cooperative game theory. I show that major model classes from machine learning are estimation consistent for the large class of piecewise analytic functions and introduce tests for model bias and estimator robustness of model sub-components. The inference properties of state-of-the-art machine learning models, like artificial neural networks, support vector machines and random forests are tested using numerical simulations and real-world data. The proposed framework is unique in the sense that it is identical to the standard case of inference on a linear model if the model is linear in parameters. This makes it a well-motivated extension of inference to the general non-linear model and strengthens the case for the use of machine learning to inform decisions.

#### **Environmental and Development Economics**

Corbett Grainger, University of Wisconsin:

*Do Regulators Strategically Avoid Pollution Hotspots when Siting Monitors? Evidence from Remote Sensing of Air Pollution*

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*Abstract:*

In the United States, the design of ambient air pollution monitoring networks is delegated to local regulatory agencies. Monitoring data determine compliance with federal standards, creating a principal-agent problem. We employ monitoring data and satellite-derived pollution estimates to characterize pollution at unmonitored locations. We then test for strategic siting behavior by local regulators. Leveraging differences in federal oversight between attainment and nonattainment counties, we find evidence that local regulators avoid pollution hotspots when siting new monitors. Monitoring data in attainment counties systematically understates pollution compared to nonattainment counties, suggesting that nonattainment designation, used widely in the economics literature, is endogenous.

### **Hamburg Lectures on Law & Economics**

Dr. Anastasia Litina, University of Ioannina:

*Immigrant Political Trust Unraveled*

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*Abstract:*

This research explores the forces behind the formation and the transmission of immigrants' political trust and highlights the differences with respect to interpersonal trust. First, it theoretically and empirically establishes that immigrants coming from corrupt countries, tend to overtrust the institutions at the host country. Second, the analysis explores whether political trust is shaped primarily by mean attitudes and/or by average institutional quality (both at the origin country). Interestingly, the findings establish that institutions have a stronger effect on shaping immigrants' political trust than mean attitudes of their compatriots. Third, the implications of this effect are explored. The inflated trust of immigrants towards host institutions results in lower levels of political participation.

### **PhD Seminar**

Silke Sturm, Universität Hamburg:

*Political Competition: How to Measure Party Strategy in Direct Voter Communication?*

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*Abstract:*

Political competition, party strategy and communication in times of social media is a growing issue. Due to increasing social media presence of parties and voters alike, the direct communication became more important for party competition. This paper aims to improve the methodological approach to analyze political competition and communication. The dataset includes over 30,000 Facebook status messages by seven German parties from January 2014 until February 2018. Topic modelling, which is common in other fields, allows evaluating the party communication on a daily basis. The results show the high accuracy of calculating party relevant issues. In order to get an impression about the tone of the debate a sentiment analysis was conducted. The prevalence of topics and sentiments over time allows a precise monitoring of the political debate.

**Research Seminar “Microeconomics”**

Karine Nyborg, University of Oslo:

*Humans in the Perfectly Competitive Market: Report from a Fictional*

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*Abstract:*

The perfectly competitive market – a hypothetical situation free of market failure – is a central benchmark for economic theory, providing the basis for the two welfare theorems. The radical abstractions of this idea makes it hard to grasp its full implications, however. In this essay, I explore the perfectly competitive market using literary fiction. Part I discusses fiction as a tool for economic theory. Part II is a science fiction story about a couple travelling to the perfectly competitive market for their honeymoon. Part III highlights main theoretical insights emerging from the story. First, to preclude market failure, complete social isolation must prevail. Second, the requirements of ‘no asymmetric information’ and ‘no external effects’ are extremely hard to reconcile. In particular, if trade is permitted at all times, deliberate learning is allowed, and new information can matter for welfare, no perfectly competitive market can exist.

*The next EconNewsletter will be published on Monday, January 28, 2019.*

*Editorial deadline: Friday, January 25, 2019.*

**EconNewsletter**

Department of Economics

University of Hamburg

Von-Melle-Park 5, 20146 Hamburg

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