SEMINAR CALENDAR

Quantitative Economics

Ricardo Reis, London School of Economics: The Constraint on Public Debt When \( r < g \) But \( g < m \)  
Tuesday November 16  
12:15–13:30  
This seminar will be held in a digital format. For participation via Zoom please register via the following link:  
https://uni-hamburg.zoom.us/meeting/register/tJYvc-itqzgpHNVhBUWXWPX6bv3WwEHioDq5

Hamburg Lectures in Law and Economics

David Law, University of Virginia: Automated Text Analysis and the Study of Constitutions  
Wednesday November 17  
18:15–19:45  
This lecture will be held in a digital format. For participation via Zoom please register via the following link:  
https://forms.office.com/r/yz4eVsaxi7

PhD Seminar

Christina Maaß, Hamburg University: Shedding Light on Dark Figures: First Steps Towards a Methodology for Estimating Actual Numbers of COVID-19 Infections in Germany  
Thursday November 18  
12:15–13:15  
The seminar will take place in a hybrid format: on campus in room VPM5 0022 (next to the Haspa café) as well as broadcast via Zoom. To participate via Zoom, please use the following registration link:  
https://uni-hamburg.zoom.us/meeting/register/u5wuduCopj0rEtQiSUrX5AtRZeNYUgl5XO-m

Interdisciplinary Research Seminar

Kenneth Benoit, London School of Economics and Political Science: Measuring Textual Sophistication in any Domain in any Language using Machine Learning  
Thursday November 18  
17:15–18:45  
R. S28 (VMP9)  
This lecture will be held in a hybrid format. For participation via Zoom please register via the following link:  
ABSTRACTS

Quantitative Economics
Ricardo Reis, London School of Economics:
*The Constraint on Public Debt When r<g But g<m*

Abstract:
With real interest rates below the growth rate of the economy, but the marginal product of capital above it, the public debt can be lower than the present value of primary surpluses because of a bubble premium on the debt. The government can run a deficit forever. In a model that endogenizes the bubble premium as arising from the safety and liquidity of public debt, more government spending requires a larger bubble premium, but because people want to hold less debt, there is an upper limit on spending. Inflation reduces the fiscal space, financial repression increases it, and redistribution of wealth or income taxation have an unconventional effect on fiscal capacity through the bubble premium.

Hamburg Lectures in Law and Economics
David Law, University of Virginia:
*Automated Text Analysis and the Study of Constitutions*

Abstract:
Lawyers know that the choice of language in legal texts matters. This is particularly true of constitutions, which are not simply transmission mechanisms for legal rules and concepts. Constitutional language is also a medium of emphasis, tone, rhetoric, and style; it bears the semantic footprint of its author and the forces that have shaped its authorship. Linguistic patterns are telltale indicators not only of substantive topics, but also different genres or styles of constitutionalism and competing influences on constitution-writing.

Systematic empirical analysis of legal language has long been stymied by the fact it is difficult for human readers to discern subtle or complex linguistic patterns with accuracy and consistency across a large corpus of documents, such as the hundreds of constitutions that have been adopted over the last two centuries. The traditional way in which quantitative empirical scholars analyze legal texts is to code the text into numerical data that can then be analyzed statistically. In the process of coding language into numbers, however, the text itself is necessarily discarded, along with anything that falls outside the coding scheme. Consequently, traditional coding-based approaches are not well suited to studying phenomena that escape our awareness or cannot easily be coded by hand.

Recent innovations in the area of automated content analysis have made it possible to perform precisely this kind of analysis. These new methodologies, adopted from computational
linguistics, excel at identifying and analyzing subtle, complex verbal patterns in a rapid, systematic, and objective way. They potentially enable us to measure, in quantitative terms, how much of the text is associated at the linguistic level with a particular topic, influence, or genre. Although automated content analysis has already attracted widespread interest for its obvious advantages of speed and consistency over manual techniques, its most profound advantage may be that it liberates us from reliance on potentially incomplete coding schemes. Instead of forcing us to analyze text through the filter of our preexisting conceptual categories, automated content analysis allows the text to speak for itself.

**PhD Seminar**  
Christina Maaß, Hamburg University:  
*Shedding Light on Dark Figures: First Steps Towards a Methodology for Estimating Actual Numbers of COVID-19 Infections in Germany*

**Abstract:**  
In order to shed light on immeasurable real-world phenomena, we investigate the actual number of COVID-19 infections in Germany based on big data. The true occurrence of infections is not visible, since not everyone infected is tested. This paper demonstrates that coronavirus-related search queries issued on Google can depict true infection levels appropriately. We find significant correlation between search volume and national as well as federal COVID-19 cases as reported by RKI. Additionally, we discover indications that the queries are indeed causal for infection levels. Finally, this approach can replicate varying dark figures throughout different periods of the pandemic.

**Interdisciplinary Research Seminar**  
Kenneth Benoit, London School of Economics and Political Science:  
*Measuring Textual Sophistication in any Domain in any Language using Machine Learning*

**Abstract:**  
Measuring the readability or sophistication of language has a long tradition, but this tradition is rooted in fields of education and psychology rather than the domains to which it is frequently applied. Rather than use out of context measures that may have little applicability to other domains, we show how to develop and test indexes of textual sophistication fitted to any domain, using a variety of lexical and linguistic markers combined with crowd-sourced judgments about textual difficulty. Because the approach is general, it can be fitted to any domain. We demonstrate this approach by measuring the sophistication of political communication, reanalysing the State of the Union corpus to demonstrate how conclusions
about the decline of linguistic sophistication in politics differ when using our improved approach.