



Upcoming Seminars

Thursday, 30.01.2025

14:00-15.00

ZEW Heinz König Hall

ZEW Research Seminar

Hilde Kühne, Tübingen

"A short history of LLMs"

Monday, 03.02.2025

13.30-14.30

AWI room 00.010

Departmental Seminar

Ludovica Gazze, Warwick

"How large are methane emissions from the upstream oil and gas industry and why are they there? Evidence from Colorado"

(Host: Timo Goeschl)

Friday, 07.02.2025

14.00-16.00

[Hybrid click for link](#)

Room 117,

Institute for Philosophy

Economics

Daniel Schunk, Mainz

"Self-regulation Training in Primary Schools and Academic Achievements: Evidence from a Randomized Controlled Trial"

Abstracts

ZEW Research Seminar

Hilde Kühne

"A short story of LLMs"

In recent years, Large Language Models (LLMs) have revolutionized the landscape of natural language processing, providing new capabilities in generating human language. This talk presents a concise historical overview of the evolution of language processing, focussing on where they come from, how recent innovations emerged, and what current models can and can not do. We will explore key milestones, including the advent of neural networks and transformer architectures that have enabled models like GPT.

Additionally, I will touch upon the implications that accompany these technological advancements, outlining both challenges and opportunities they present for the future.

Departmental Seminar

Ludovica Gazze

"How large are methane emissions from the upstream oil and gas industry and why are they there? Evidence from Colorado" *

Methane emissions contribute to climate change. Because methane is a valuable output of the oil and gas production industry, reducing fugitive emissions can deliver private and social benefits. Partnering with the Colorado air quality regulator, we measured methane emissions from 9% of oil and gas production facilities in the Denver-Julesburg basin over two years. These facilities' emissions comprise only 0.02% of their production. We experimentally varied facilities' abatement costs, by providing information about ex-ante leak risk, and regulatory scrutiny, by increasing the chance of inspections. Reducing the costs of finding emissions appears more effective than increasing regulatory scrutiny.

* joint work with Thomas Covert, Michael Greenstone, and Olga Rostapshova

Economics Seminar

Daniel Schunk

"Self-regulation Training in Primary Schools and Academic Achievements: Evidence from a Randomized Controlled Trial"

Children's self-regulation abilities are key predictors of educational success and other life outcomes such as income and health. However, self-regulation is not a school subject, and knowledge about how to generate lasting improvements in self-regulation and academic achievements with easily scalable, low-cost interventions is still limited. I present the design and results of a randomized controlled field study which integrates a short self-regulation teaching unit based on the concept of mental contrasting with implementation intentions into the school curriculum of first graders. We discuss the effects of the training on academic achievements and show that the self-regulation unit can be integrated into the regular school curriculum at low cost and is easily scalable. The presentation will also include the design of a replication study of the self-regulation intervention.

Prof. Dr. Daniel Schunk is a Professor of Economics at the University of Mainz and a Research Fellow at the Federal Institute for Population Research and CESifo. He earned his PhD in Economics from the University of Mannheim. His research, supported by major institutions such as the German National Science Foundation and the Volkswagen Foundation, focuses on behavioral economics and public policy. He is also the founder and Co-Director of the Mainz Behavioral and Experimental Laboratory (MABELLA) and an Associate Editor of the Journal of Economic Behavior and Organization.

New Publication

Conrad, C., and R.F. Engle (2024). "Modelling volatility cycles: The MF2-GARCH model. " *Journal of Applied Econometrics*, accepted for publication.

New Working Paper

Reiner Manstetten, Malte Faber (2025), "Ist die Welt noch zu retten? Zur Enzyklika Laudato si von Papst Franziskus", Discussion Paper, No 762, Department of Economics, *Heidelberg University*.

Talks and Research visits

Axel Dreher co-organized the Political Economy of International Organization (PEIO) conference at *Harvard University*, January 23-25, and discussed a paper there.

Zeno Enders presented the paper "The Experience Formation Mechanism" (joint work with Christian Conrad and Alexander Glas) in the departmental seminar at the *University of Tübingen*, January 28.

This was the last newsletter for this semester. The NL-Office will be back in April.
You can keep sending your announcements during the break to
newsletter@awi.uni-heidelberg.de