

**Jean-Robert Tyran, Wien    Departmental Seminar 09.12.2024**

**(Host: Christoph Vanberg)**

## **Sorting Fact from Fiction when Reasoning is Motivated \***

### **Abstract**

How is sorting fact from fiction and updating from news shaped by motivated reasoning, cognitive ability, and overconfidence? We present subjects in an online experiment with news items on immigration, inequality, climate change and science that (to the best of our knowledge) are true or false. As predicted by our model, we find that motivated reasoning reduces acknowledging “inconvenient truths” (i.e., news that are counter to one’s identity), while cognitive ability promotes it. Motivated reasoning and overconfidence limit updating after fact checking (i.e. subjects receive informative but noisy signals about the veracity of the news), cognitive ability promotes updating. Surprisingly, higher cognitive ability is strongly negatively related to accuracy in news discernment and updating in news on science and (to a lesser degree) on climate change. The reason seems to be that those with higher cognitive ability are more motivated to believe that anti-science and anti-climate change news are false.

**\*Joint work with** Edoardo Cefalà, Melis Kartal, and Sylvia Kritzinger