Bridges Away Day 2019

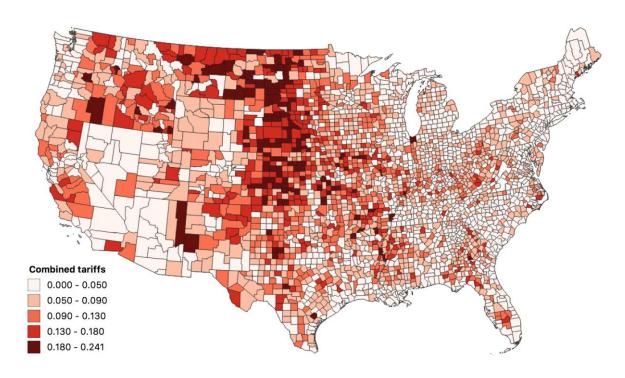
Room MSB0.07 (New Statistics Department)

4 June 2019 Start 11:30 End 17:00

- **11:40** Andy Ferrara WWI Anti-German Sentiment and Economic Growth in U.S. Counties
- 12:00 Carlo Schwarz Tariffs and Politics: Evidence from Trump's Trade Wars
- **12:20 Rachel Wilkerson** A Separation Theorem for the Chain Event Graph
- 12:40 Jonathan Muscat A Dynamic Trading Model for Realisation Utility
- 13:00 Lunch
- **14:00 Alessandro Castagnetti** Protecting the Ego: Information Selection and Updating
- **14:20 Irina Kholodenko** Does strategic interaction produce polymorphism in the intensity of cooperative attributes?
- **14:40 Shi Zuo** Can apologies improve cooperation? Evidence from a Public Goods Games experiment
- 15:00 Coffee Break
- **15:20 Eva Jimenez Mesa** The Influence of Children's Attentional Spans on Detecting Contextual Diversity Cues
- **15:40 Thomas Kelly** Described blocking examining an excellent answer, to the wrong question
- **16:00 Elena Kochkina** Incorporating uncertainty estimation into rumour verification
- **16:20 Giovanni Burro** Age means patience to the rich but impatience to the poor
- 16:40 Wine Reception

11:40 Andy Ferrara WWI Anti-German Sentiment and Economic Growth in U.S. Counties

This paper studies the long-term consequences of a short-lived tasted-based discrimination shock. We use the case of Germans in the U.S. during World War I, when this particular immigrant group was exposed to strong anti-group sentiment. Exploiting county-level mortality rates among U.S. soldiers in Europe as exogenous shifter of anti-German sentiment, we show that counties which discriminated away their German population satisfied the local anti-group feelings which came at the cost of reduced future economic performance. This is driven by the manufacturing sector, a small sector in terms of employment but large in terms of economic output, where Germans tended to be concentrated.



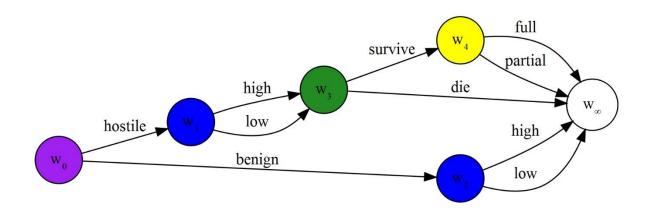
12:00 Carlo Schwarz Tariffs and Politics: Evidence from Trump's Trade Wars

Are retaliatory tariffs politically targeted and, if so, are they effective? We use the recent trade escalation provoked by the US President Trump to investigate these questions. We find evidence that retaliation was targeted to areas that swung to Trump in 2016 (but not to Republican candidates running for Congress in the same year). We use a novel simulation approach to assess whether retaliation was optimally chosen, maximizing political targeting, while mitigating harm to one's own economy. Lastly, we provide evidence that retaliation was effective in producing economic harm and that it might have produced some political pressure.



12:40 Rachel Wilkerson A Separation Theorem for the Chain Event Graph

The class of graphical models called Chain Event Graphs are widely used. It shares many of the advantages of the BN model while also allowing for asymmetries and context-specific conditional independence relationships. Building on the partial partial querying methodology, we sketch necessary and sufficient conditions for the CEG to be valid.



12:40 Jonathan Muscat A Dynamic Trading Model for Realisation Utility

The concept of utility is classically related to the ideas of consumption or final wealth. However, a new strand of literature; formalised primarily in Barberis and Xiong (2012), suggests that investors also derive utility from realising gains and losses when selling assets. In our work we discuss a few generalisations of their framework which describes an agent who is allowed to invest all their wealth in a risky asset and re-invests their wealth in this asset after each liquidation point.

We first present the solution of an agent whose utility function is characterised by the S-shaped utility function defined in Kahneman and Tversky (1992). We show that under this framework, the agent only sells at a gain and never stops on the losses side. In the second part of our work in this area, we propose a slight generalisation of the utility function where the closer the agent gets to losing everything, the steeper their utility decreases to \$-\infty\$. We show that this leads to cases under which it is sometimes optimal for the agent to sell both at a gain and a loss.

Finally, we will discuss our work in progress on a similar problem where the agent is allowed to invest in both a risky and a risk-less asset concurrently and is allowed to re-balance their portfolio every time they sell the risky asset. This problem takes the form of a stochastic impulse control problem.



14:00 Alessandro Castagnetti Protecting the Ego: Information Selection and Updating

Informational sources in the real world vary in their levels of informativeness and skewness. Individuals, therefore, frequently have to choose from which source to gather information. Neoclassical economics predicts that individuals have a strict preference for choosing the most informative information source because this choice leads to holding accurate beliefs and, thus, in making optimal choices. However, individuals might prefer to receive information from less informative and positively biased information structures when the ego is at stake. Importantly, the way individuals interpret information conditional on the source chosen can also be subject to biases. This project aims at identifying how individuals search for ego-relevant information and how they subsequently update their beliefs once they receive signals from the chosen information structure. In particular, we ask: (1) Do individuals selectively choose less informative and positively skewed information structures in order to maintain positive views about themselves? (2) Is the subsequent belief updating process biased by the information structure chosen? In our lab experiment, participants are ranked either according to performance in an IQ test (ego-relevant task), or according to a random number (neutral task). The subjects receive three signals about their rank and we elicit in an incentive-compatible way their posterior beliefs about being in the top or bottom half of the distribution. Before the updating stage, subjects choose from which information source to receive signals. One information source provides balanced feedback irrespective of the subjects' rank. In contrast, the other information source withholds information if the subject is in the bottom half of the distribution. Intuitively, an individual who wants to protect his ego will choose the skewed information source in the IQ treatment even if this comes at the cost of forming less precise posterior beliefs.

In our preliminary results, we find that subjects are significantly more likely to choose the less informative and positively skewed information structure if the rank is based on the ego-relevant task. Subjects who choose the skewed information structure end up with too high posteriors. We find that this is driven by two channels: (1) Subjects who select into the skewed information structure receive less information; and (2) These subjects also misinterpret the informational content of the (negative) signals. Overall, these results are consistent with participants displaying motivated beliefs.



14:20 Irina Kholodenko Does strategic interaction produce polymorphism in the intensity of cooperative attributes?

Why does the willingness to cooperate vary as a polymorphic trait within human populations? I show that such variation can arise endogenously, from players' choices, in a population of any finite number of players interacting strategically.

Suppose the initial population consists of identical players. First, let each player choose her intensity of the cooperative attribute. All players perfectly observe the chosen intensities. Then, let each player play a "Battle of the Sexes" game with every other player. The "Battle of the Sexes" payoffs will depend on the cooperative attributes that were chosen in the first stage. Final payoffs realize as the sum of payoffs from the second stage of the game minus the cost of the cooperative attribute.

I consider what distribution of the cooperative attribute arises in the population as a result of this strategic interaction. I show that any total surplus maximizing distribution of the attribute is supported in equilibrium and, moreover, it must be fully heterogeneous. In particular, the model predicts that no two of the initially identical players will choose equal intensities of the cooperative attribute.



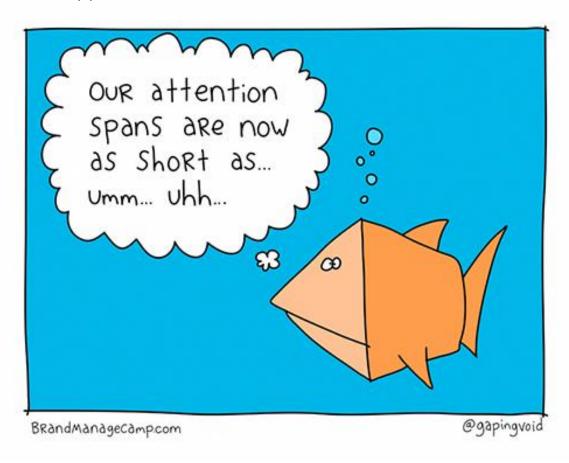
14:40 Shi Zuo Can apologies improve cooperation? Evidence from a Public Goods Games experiment

To explore the role of apologies in improving cooperation, we ran lab experiments allowing apologies in repeated public goods games. We found that compared to control group where apologies were not allowed, allowing public apologies significantly increases group contribution, while allowing private apologies increases group contribution but not significantly. Preliminary analysis provides evidence supporting that apologies serve as signals to help coordinating contribution; in addition, participants in treatment groups tend to contribute more generously from the beginning, suggesting a shift of preferences when apologising opportunities are present. Our results show that apologies have an effective role in improving cooperation, although they are often unacknowledged by people.



15:20 Eva Jimenez Mesa The Influence of Children's Attentional Spans on Detecting Contextual Diversity Cues

Previous research has demonstrated how children use contextual diversity cues to learn new words. However, simple attentional and memory processes might be sufficient. In my talk, I will explore the extent to which the attentional span influences on how children detect contextual diversity cues in word learning situations. Specifically, I will present some of our results that suggest that late talkers might have a shorter attentional span. In addition, I will present a new model that supports the idea that children might start exploiting contextual diversity cues when they start producing words, and not earlier, even though the exhibited large receptive vocabularies (comprehension) before they produced their first words.



15:40 Thomas Kelly Described blocking – examining an excellent answer, to the wrong question

This presentation details an attempt to replicate standard blocking and to establish a novel effect -described blocking.

Blocking occurs when a stimulus is not associated with a reward it consistently precedes due to a previously learned stimulus-reward pairing.

Participants were taught stimulus-reward pairings with compound stimuli during a 3-phase experiment. Participants were asked to state if stimuli predicts reward.

To investigate the standard blocking effect; in P1a participants are shown compounds to learn the value of a distractor or blocking stimulus, in P2 this distractor is paired with a target or blocked stimulus. In P3 participants are shown stimuli on their own. The key prediction is that target stimuli will elicit a lessened reward prediction than controls.

To investigate described blocking; P1a is replaced by simply telling participants the distractor has value (P1b). P2 and P3 proceeded as normal.

Participants showed excellent evidence of learning. However, based on P3 data there was no indication that participants valued targets less than controls. Participants responses across all 13 stimuli were more indicative of simple associative learning than prediction error driven learning. Indeed, ranking the 13 stimuli maps exactly onto how often participants saw a stimulus rewarded in the compound trials.



16:00 Elena Kochkina Incorporating uncertainty estimation into rumour verification

The inability to correctly resolve rumours circulating online can have very harmful real-world consequences.

We present a method for incorporating uncertainty estimates into natural language processing models for automatic rumour verification. We show that these estimates can be used to filter out model predictions likely to be erroneous, which can be passed to a human fact-checker. We propose two ways of instance rejection, supervised and unsupervised. We also show how uncertainty estimates can be used to interpret model performance as a rumour unfolds.



16:20 Giovanni Burro Age means patience to the rich but impatience to the poor

We investigate time discounting with a new data set drawn from a large representative international sample, using a novel measure of time preference we included in WIN/Gallup's 2015 End of Year survey, obtaining measures from 64 countries and over 50,000 respondents. We also had unfettered access to the complete survey, including a range of personal measures from each respondent. We summarise these data with particular attention to the interaction between income, age and time discounting. Theories of time preference generally suggest that discounting will vary with income in that poorer people will be less patient than wealthier ones. With respect to age, theories (and empirical results) are much more diverse. Overall, we find that people get more impatient with age, but that this effect is restricted to those who are relatively poorer. Wealthier people get *more* patient with age. This age-by-income interaction is found by looking at income differences within countries, but not between countries, suggesting that patience is related to relative income (older people who are poor relative to others in their country get more impatient with age) but not absolute income. We propose discounting may display a parallel to the "Easterlin paradox" in which relative income is related to changes in patience with age, but absolute income is not.

