**6th CRC TR 224 Workshop
for Young Researchers**
October 16th, 2020
Virtual workshop

Zoom Link: https://uni-bonn.zoom.us/j/91452498805?pwd=T3BZLzFuSkZEcIhmdmJieHBNbysyQT09

Friday, October 16

13:00 - 13:45	**Justus Preusser** (University of Bonn) *Simple Allocation with Correlated Types* (with Axel Niemeyer)
14:00 - 14:30	**Virtual Coffee Break**
14:30 – 15:15	**Mark Spills** (University of Mannheim) *The longrun effects of a reduction in STEM hours in High School: Evidence from Dutch Administrative Data*
15:30 – 16:15	**David Koll** (University of Mannheim) *The fiscal return to childcare policies*

Simple Allocation with Correlated Types

A principal allocates a single indivisible object to one of finitely-many agents without using monetary transfers. Each agent desires the object, and his type determines the principal's value of giving it to him. Correlation between types renders the truthful report of one agent informative about the types of others. When there are sufficiently many agents with sufficiently large type spaces, then deterministic allocation rules are not generally optimal among dominant-strategy incentive-compatible (DIC) allocation rules. In the remaining cases, the number of agents plays a central role in determining the set of implementable allocation rules. In particular, every DIC rule allocating among three agents uses at most one agents' report, and every Bayesian incentive-compatible rule that allocates among two agents is interim-equivalent to a constant rule. In either case, more sophisticated rules are implementable when further agents are present.

The longrun effects of a reduction in STEM hours in High School: Evidence from Dutch Administrative Data

The literature motivates that a STEM-major increases earnings and job possibilities. However, not many students choose this career path due to preferences and perceived difficulty level of the STEM-fields. We look at Dutch administrative data to evaluate a policy change in the Netherlands. The study load for the prerequisite field for a STEM major decreased significantly more in the university track than in the higher vocational track of high school. We show with a difference-in-difference setup that this extremely increases the participation in this field, especially for females and students from higher income households. However, there are no significant aggregate effects for tertiary education. When separating the cohorts in subgroups, we see women are less likely to do a STEM degree or PhD. People from lower income families are less likely to do a STEM major as well. Migrants are not affected different from non-migrants.

The fiscal return to childcare policies

We study the long-term fiscal implications of childcare subsidies through their impact on maternal labour supply. Taking human capital accumulation into account, we explicitly capture life-cycle career aspects in a dynamic structural household model of female labour supply and childcare decisions: higher labour supply of mothers today results in higher expected future earnings. In our dynamic structural model, we allow households to be heterogeneous in their taste for home produced childcare, their taste for leisure, and in their access to informal childcare (e.g. by grandparents). Using German survey data, we provide a structural estimate of the degree to which childcare subsidies are dynamically self-financing through higher labour income tax revenue. Further, we explore how the marginal fiscal returns of childcare subsidies depend on the

group of families targeted. Our estimates show that targeting childcare subsidies is a useful tool to increase the ability of these policies to be self-financing.