

# List of Projects

## Bernhard Schütz

### **Genetic innovation, intermediate goods and energy prices in an agent-based model**

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Agent-based models have been receiving ever more attention in recent years. Especially since the crisis of 2008, there have been calls for new research tools. Agent-based models are an interesting option: they allow study of the behaviour of heterogeneous agents and the effects of such heterogeneity on the total economy. We propose introducing three novel extensions to a state-of-the-art agent-based model: First, we allow for rich interactions between industries by incorporating intermediate goods into the production process. Secondly, the model is extended to enable a new way to model technological change (“genetic optimisation”). Thirdly, we propose to account for the biophysical dimension by including energy usage as a factor of production.