LECTURE:
# AGENT-LEVEL LEARNING IN GENERAL EQUILIBRIUM

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Campus Griebnitzsee, house 1, room 2.31
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We consider the aggregate implications of boundedly-optimal decision making. Within the context of dynamic, stochastic general equilibrium models, agents are taken to be limited in their sophistication, both as forecasters and as decision makers. Following the shadow-price approach developed in Evans and McGough (2018), each period these agents, referred to as SP- learners, form expectations using estimated, linear forecasting models, and they take decisions based on trade-offs as measured by perceived shadow prices; agents' decisions and actions are then coordinated through a temporary equilibrium implementation of market clearing, which results in aggregate outcomes. Agents then use these aggregate outcomes, together with agent- specific information, to update their forecasting models, and the process repeats, thus yielding the economy's dynamics. We embed SP-learners into a non-linear, flexible-price model with capital, and into a non-linear model with nominal price frictions, and study transition and asymptotic dynamics, in both homogeneous and heterogeneous versions of each model.