**The Limited Power of Monetary Policy in a Pandemic**

The authors of the paper embed an extension of the classic SIP model in a New Keynesian model and develop a framework where economic decisions and virus dynamics are interlinked and analyze the role played during a pandemic by two monetary policy tools: conventional interest rate policy and forward guidance. In the model, increasing consumption increases the probability of becoming infected and individuals therefore have to strike a balance between the willingness to consume and the desire to avoid infection. The intertemporal substitution channel is therefore partly impaired and households’ consumption is less sensitive to real interest rate changes than normal times.

SIR model: Extended version of standard SIR model by Kermarck and McKendrick 1927, where transition probability from being healthy to sick depends on people’s economic decisions.

Economic model: Households choose the amount of consumption, labor, and amount to invest into bonds to maximize their utility. A continuum of monopolistic firms produce differentiated goods according to a linear technology and face quadratic price adjustment costs. The monetary authority sets short-term nominal interest rates using Taylor-type rule with effective lower bound.