



**Friday, September 24, 2021**

**2:30 to 4:00 PM**

**Location:**

**Economics Room 1002**

**Xiaoyang Wang** is an Assistant Professor of Economics at UNM. He obtained a Ph.D. in Agricultural and Applied Economics from the University of Illinois Urbana-Champaign, a M.S. in Agricultural Economics from the University of Missouri - Columbia and a B.A. from the Renmin University of China. Before joining UNM, he worked as the manager of commodity research and trading in Smithfield Foods. His research interests primarily focus on applied econometric methods and commodity markets. Current research projects study the market quality issues of commodity derivatives markets, under the context of technology improvement, climate change and market structural shifts.

## **Shocks, Cycles and Adjustments: China's Hog Market under COVID-19 and ASF**

We evaluate the dynamic impact of COVID-19 pandemic, African Swine Fever (ASF) and related global trade uncertainties on China's hog market. We make three contributions. First, we build a model that systematically consider the shocks, cycles and policy adjustments in commodity market. In light of this we define it as SCA model, which contributes to the existing toolbox for policy and impact evaluation in commodity markets with insights into the timing of impact dynamics. Second, the SCA model is applied to evaluate five sets of concerned shock scenarios from 2020 to 2024, including: demand shock; corn price increase; pork import reduction; second wave of ASF; and a combination of these shocks. Simulation results demonstrate the reaction of hog cycle to different shocks with numerical output for welfare and policy implications. Third, based on the simulation results, we offer a new explanation to the observed inconstant dynamics in hog cycles. we find production and economic adjustment lags generate constant and predictable hog cycles, while the external shocks lead hog cycles to be inconstant with varying phase and amplitude. This helps reconcile previous literatures exploring the sources and causes of commodity cycles.