



**Qihui Chen**

**The Chinese University of Hong Kong, Shenzhen**

**Venue: LAU 7-208**

**Date: 30 Nov 2023 (Thursday)**

**Time: 11: 00 - 12: 30**

### **Abstract:**

This paper introduces a simple and tractable sieve estimation of semiparametric conditional factor models with latent factors. We establish large- $N$ -asymptotic properties of the estimators without requiring large  $T$ . We also develop a simple bootstrap procedure for conducting inference about the conditional pricing errors as well as the shapes of the factor loading functions. These results enable us to estimate conditional factor structure of a large set of individual assets by utilizing arbitrary nonlinear functions of a number of characteristics without the need to pre-specify the factors, while allowing us to disentangle the characteristics' role in capturing factor betas from alphas (i.e., undiversifiable risk from mispricing). We apply these methods to the cross-section of individual U.S. stock returns and find strong evidence of large nonzero pricing errors that combine to produce arbitrage portfolios with Sharpe ratios above 3. We also document a significant decline in apparent mispricing over time.

### **Biography:**

Dr. Qihui Chen earned his Ph.D in Economics from the University of California, San Diego in 2017. Currently, he is an associate professor of economics at the School of Management and Economics, The Chinese University of Hong Kong, Shenzhen. His research interests include econometrics and machine learning.

**Your attendance is most welcome!**



Department of  
Management Sciences

香港城市大學  
City University of Hong Kong