DEPARTMENT of **INDUSTRIAL ENGINEERING** UNIVERSITY of HOUSTON

BROADEN HORIZONS | EXTEND MINDS



DR. JOHN BIRGE Jerry W. and Carol L. Levin Distinguished Service Professor Operations Management University of Chicago

> **Date**: Friday, Mar 24, 2017 **Time**: 1 - 1:50 pm **Location**: D3 W122

Dynamic Learning in Strategic Pricing Games

Abstract: In monopoly pricing situations, firms should optimally vary prices to learn demand. The variation must be sufficiently high to ensure complete learning. In competitive situations, however, varying prices provides information to competitors and may reduce the value of learning. Such situations may arise in the pricing of new products such as pharmaceuticals. This talk will discuss how this effect can be strong enough to stop learning so that firms optimally reduce any variation in prices and choose not to learn demand. The result can be that the selling firms achieve a collaborative outcome instead of a competitive equilibrium. The result has implications for policies that restrict price changes or require disclosures.

Biography: John R. Birge is the Jerry W. and Carol Lee Levin Distinguished Service Professor of Operations Management at the University of Chicago Booth School of Business. Previously, he was Dean of the McCormick School of Engineering and Applied Science and Professor of Industrial Engineering and Management Sciences at Northwestern University. He also served as Professor and Chair of Industrial and Operations Engineering at the University of Michigan, where he also established the Financial Engineering Program. He is former Editor-in-Chief of *Mathematical Programming, Series B* and former President of INFORMS. His honors and awards include the IIE Medallion Award, the INFORMS Fellows Award, the MSOM Society Distinguished Fellow Award, the Harold W. Kuhn Prize, the George E. Kimball Medal, the William Pierskalla Award, and election to the US National Academy of Engineering. He received M.S. and Ph.D. degrees from Stanford University in Operations Research, and an A.B. in Mathematics from Princeton University.

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