



YCCSA Seminar Series Autumn 2019

An interdisciplinary seminar series hosted by the York Cross-disciplinary Centre for Systems Analysis aimed at researchers from all disciplines

“Deep pockets” in a stochastic production game

Professor Jacco Thijssen

The York Management School, University of York

Friday, 11 October 2019

Computer Science, CSE/082&083 at 13:30

Abstract:

We analyze a dynamic Cournot equilibrium in a continuous time stochastic game between capital constrained firms. We depart from the standard literature by allowing the firms to choose both the production strategy and the dividend policy. When profits evolve stochastically, a negative liquidity shock can lead to bankruptcy. In this setting the financially strong firm may have an incentive to engage in aggressive competition that could drive the opponent out of the market. We focus on the link between predation incentives and the dividends policy and find that the presence of product market competition induces fewer dividend payouts. We also find that predatory behavior only occurs when the prey is not distributing any dividends. When both firms pay out dividends it is optimal to be completely myopic in their production strategy, i.e. to choose the production plan that maximizes their deterministic period profits.

The seminar includes a refreshment break to fuel interdisciplinary discussion

Ron Cooke Hub is on Heslington East Campus – accessible by free bus services

Nos. 66 and UB1 running at frequent intervals from Heslington West.

The YCCSA Seminar room is on the second floor