



**The Hong Kong Polytechnic University  
Department of Applied Mathematics**

**Seminar**

**The Value of Informational Arbitrage**

by

**Dr. Claudio Fontana**

**Paris Diderot University (Paris 7)**

**Abstract**

In the context of a general semimartingale model of a complete market, we aim at answering the following question: How much is an investor willing to pay for learning some inside information that potentially allows to achieve arbitrage? If such a value exists, we call it the value of informational arbitrage. In particular, we are interested in the case where the inside information yields arbitrage opportunities but not unbounded profits with bounded risk. In the spirit of Amendinger et al. (2003), we provide a general answer to the above question by relying on an indifference valuation approach. To this effect, we establish some new results on models with inside information and study optimal investment-consumption problems in the presence of initial information and arbitrage, also allowing for the possibility of leverage. We characterize when the value of informational arbitrage is universal, in the sense that it does not depend on the preference structure. Our results are illustrated with several explicit examples.

**Date : 14 May, 2018 (Monday)**

**Time : 4:00p.m. – 5:00p.m.**

**Venue : TU801, The Hong Kong Polytechnic University**

**\* \* \* ALL ARE WELCOME \* \***