

December 18, 2013  
KAP 245  
3:30 PM – 4:30 PM

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***“Martingale optimal transport and martingale inequalities”***

**Abstract:** We start from previously known results which establish martingale inequalities as consequences of pathwise inequalities. These results have natural financial interpretation in terms of robust hedging of Look back options by means of semi-static strategies. The problem of martingale optimal transport is a systematic method for finding these inequalities together with the corresponding pathwise counterpart. We provide new inequalities controlling the maximum of submartingales by a finite number of their marginal distributions. This extends previous results by Brown, Hobson & Rogers, and Madan & Yor.