Mathematical Finance and Stochastic Analysis Seminar, Spring 2013

Department of Applied Mathematics
Illinois Institute of Technology

Day & Time	Location	Speaker\Title
Monday, May 20th 10am -1pm	E1 121	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue discussing dynamic acceptability indices via backward stochastic difference equations.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will present and discuss modeling results.
		Xin Tong Title: Kelly Criterion Ms. Xin Tong will continue the topic of Kelly criterion.
Monday, May 13th 10am -1pm	E1 121	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue discussing dynamic acceptability indices via backward stochastic difference equations.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will present modeling results for bivariate processes and propose an alternative measure.
		Xin Tong Title: Kelly Criterion Ms. Xin Tong will continue the topic of Kelly criterion.
Monday, Apr. 29th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue discussing dynamic acceptability indices via backward stochastic difference equations.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate some results and discuss the necessity of modifying the systemic risk measure.
		Xin Tong Title: Kelly Criterion Ms. Xin Tong will talk about Kelly criterion.
Monday, Apr. 22nd 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue discussing dynamic acceptability indices via backward stochastic difference equations.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will talk about restructuring financial institutions.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution.

Mathematical Finance and Stochastic Analysis Seminar, Spring 2013

Day & Time	Location	Speaker\Title
Monday, Apr. 15th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will talk about dynamic acceptability indices via BSDE.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate a trivariate Markov process and discuss its properties.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution.
Monday, Apr. 8th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue the topic of no arbitrage pricing through g-expectation.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will verify the result with the bivariate Markov process and illustrate a trivariate Markov process.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution.
Monday, Apr. 1st 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue the topic of no arbitrage pricing through g-expectation.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will verify previous results with the bivariate process and other distributions. She will try to compare the difference between with and without restructuring property.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution.
Monday, Mar. 25th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will discuss no arbitrage pricing through g-expectation.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will summarize limitations of previously proposed model and discuss possible solutions.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution.

Mathematical Finance and Stochastic Analysis Seminar, Spring 2013

Day & Time	**Location**	**Speaker\Title**
Monday, Mar. 11th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will discuss the relationship between risk measures and g-expectations. He will also present examples of risk measures driven by g-expectation.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will finish the illustration on systemic risk and discuss some problems regarding expanding it to large numbers.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution. He will also show that computations could be simplified into single-period problems and computed recursively.
Monday, Mar. 4th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will study the properties of distorted Levy process and try to apply it to acceptability index.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate a case of a trivariate process on systemic risk.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution. He will also show that computations could be simplified into single-period problems and computed recursively.
Monday, Feb. 25th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue to discuss concave distortions in dynamic case.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate a case of a trivariate process on systemic risk.
		Marcin Pitera Title: Multiperiod Portfolio Optimization Mr. Marcin Pitera will continue the topic of the existence and uniqueness of the solution. He will also show that computations could be simplified into single-period problems and computed recursively.

Mathematical Finance and Stochastic Analysis Seminar, Spring 2013

Day & Time	Location	Speaker\Title
Monday, Feb. 18th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will discuss concave distortions in dynamic case.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will report the paper "CVA for Bilateral Counterparty Risk of Collateralized Contracts under Systemic Risk" by Durand and Rutkowski.
		Marcin Pitera Title: Multiperiod Portfolio Optimization with Expected Utility and Multiple Coherent Risk Constraints Mr. Marcin Pitera will talk about the existence and uniqueness of the solution. He will also show that computations could be simplified into single-period problems and computed recursively.
Monday, Feb. 11th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will report the paper "On Consistent Valuations Based on Distorted Expectations: from Multinomial Random Walks to Levy Processes" by Madan, Pistorius and Stadje.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will finalize the topic about calibrating default intensity from lending activities and report the paper "CVA for Bilateral Counterparty Risk of Collateralized Contracts under Systemic Risk" by Durand and Rutkowski.
Monday, Feb. 4th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue to discuss concave distortions in dynamic case and verify each argument in detail.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will reformulate and discuss the possibility to calibrate default intensity from lending activities in a simple set-up.
Monday, Jan. 28th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue to discuss concave distortions in dynamic case.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate her perspective on extracting default intensity from lending activities.

Mathematical Finance and Stochastic Analysis Seminar, Spring 2013

Day & Time	**Location**	**Speaker\Title**
Monday, Jan. 21st 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will continue to discuss concave distortions in dynamic case.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will illustrate how to calibrate default intensity from lending activities in a simple set-up and discuss the possibility to extend this idea to a more complicated framework.
Monday, Jan. 14th 10am -1pm	E1 034	Tao Chen Title: Dynamic Acceptability Indices Mr. Tao Chen will discuss a possible one way to extend MINMAXVAR to dynamic case through g-expectation.
		Yu-Sin Chang Title: Systemic Risk Ms. Yu-Sin Chang will share an idea to construct a mathematical model of monitoring systemic risk.