## Mathematical Finance and Stochastic Analysis Seminar, Fall 2012 Department of Applied Mathematics Illinois Institute of Technology

Day & Time	Location	$\mathbf{Speaker} $
Monday, Nov. 26th	E1 034	Mariusz Neieweglowski
10am - 1pm		Title: Backward Stochastic Differential Equation
		Dr. Neieweglowski will start give a presentation about BSDE for
		pricing and hedging of assets paying dividends.
		Tao Chen
		Title: Dynamic Acceptability Indices and Risk Measures
		Mr. Tao Chen will continue the investigation on the dynamic con-
		sistency properties of dynamic acceptability index and dynamic
		risk measures with process as input.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin will summarize the mathematical representations of
		systemic risk.
Monday, Nov. 19th	E1 034	Tao Chen
10am -1pm		Title: Dynamic Acceptability Indices and Risk Measures
		Mr. Tao Chen will investigate the dynamical consistency prop-
		erties of dynamic acceptability index and dynamic risk measures
		with process as input.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin will summarize some papers regarding systemic risk
		but in details.
Monday, Nov. 12th	E1 034	Tao Chen
10am -1pm		Title: g-Expectation and Dynamic Acceptability Indices
		Mr. Tao Chen will present left continuity of conditional risk mea-
		sures via g-expectation and discuss the definition of dynamic ac-
		ceptability index with process as input.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin will focus on systemic risk and present Massimo
		Morini's paper: Solving the Puzzle in the Interest Rate Market.

Day & Time	Location	Speaker\Title
Monday, Nov. 5th	E1 034	Tao Chen
10am -1pm		Title: G-Expectation, g-Expectation and Acceptability Indices
		Mr. Tao Chen will start to talk about G-expectation. He would
		also present the progress on dynamic AIs induced by g-expectation
		if time permits.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin will share some thoughts regarding the connections
		between systemic risk, counterparty risk and funding costs.
Monday, Oct. 29th	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices and g-Expectation
		Mr. Tao Chen will show the proof of time consistency for accept-
		ability indices induced by g-Expectation and extend such AIs to
		dynamic case.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin is going to summarize the interactions between sys-
		temic risk, funding cost and counterparty risk in the literature.
Monday, Oct. 22nd	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices and g-Expectation
		Mr. Tao Chen will continue investigating the properties of dy-
		namic acceptability indices induced by g-expectation.
		Yu-Sin Chang
		Title: Systemic Risk
		Ms. Yu-Sin Chang will present Lipton and Savescu's paper: Pric-
		ing Credit Default Swaps with Bilateral Value Adjustments.
		Mariusz Neieweglowski
		Title: Markov Copula
		Dr. Nieweglowski will talk about dependence between compo-
		nents of multivariate Markov processes.
		Sixiang Li
		Title: Vol Swap Pricing
		Mr. Sixiang Li will continue his talk on pricing of volatility swap.

## Mathematical Finance and Stochastic Analysis Seminar, Fall 2012

Day & Time	Location	Speaker\Title
Monday, Oct. 15th	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices and g-Expectation
		Mr. Tao Chen will continue investigating the properties of dy-
		namic acceptability indices induced by g-expectation.
		Yu-Sin Chang
		Title: CDS Pricing
		Ms. Yu-Sin Chang will present regarding two papers of Alexander
		Lipton.
		Mariusz Neieweglowski
		Title: Markov Copula
		Dr. Nieweglowski will talk about dependence between compo-
		nents of multivariate Markov processes.
		Sixiang Li
		Title: Vol Swap Pricing
		Mr. Sixiang Li will continue his talk on pricing of volatility swap.
Monday, Oct. 10th	$E1 \ 034$	Tao Chen
10am - 1pm		Title: Acceptability Indices, g-Expectation and G-Expectation
		Mr. Tao Chen will finish proving the properties of dynamic ac-
		ceptability indices induced by g-expectation and start the topic
		on G-expectation.
		Yu-Sin Chang
		Title: CDS Pricing
		Ms. Yu-Sin Chang will verify the survival probability for Poisson
		process and keep presenting the paper by Lipton and Savescu.
		Sixiang Li
		Title: Vol Swap Pricing
		Mr. Sixiang Li will present his work regarding pricing of volatility
		swap.

## Mathematical Finance and Stochastic Analysis Seminar, Fall 2012

Day & Time	Location	Speaker\Title
Monday, Oct. 1st	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices, g-Expectation and G-Expectation
		Mr. Tao Chen will present the properties of dynamic acceptability
		indices induced by g-Expectation and give an introduction of G-
		expectation with its application to finance.
		Yu-Sin Chang
		Title: CDS Pricing
		Ms. Yu-Sin Chang will verify the survival probability of the firm
		under exponential jump process and continue her topic on pricing
		of CDS with BVA.
		Mariusz Neieweglowski
		Title: Markov Copula
		Dr. Nieweglowski will continue talking about dependence between
		components of multivariate Markov processes.
Monday, Sept. 5th	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices via g-Expectation
		Mr. Tao Chen will continue presenting what he started this week.
		Mariusz Neieweglowski
		Title: Markov Copula
		Dr. Nieweglowski will talk about some topics related to depen-
		dence between components of multivariate Markov processes.
Monday, Aug. 27th	E1 034	Tao Chen
10am -1pm		Title: Acceptability Indices via g-Expectation
		Mr. Tao Chen will report the paper by Rosazza Gianin and
		Sgarra: Acceptability indexes via g-expectations: an application
		to liquidity risk. After recalling the work done by Cherny and
		Madan on coherent AIs and the "new" bid and ask prices defined
		through conic finance, Tao will show two important results of the
		paper: extension of static coherent AIs to more general quasi-
		concave ones and proof of duality between static quasi-concave
		Als and risk measures; formulation of both static and dynamic
		Als through g-expectations, properties of such Als according to
		assumptions on g-functions. Furthermore, Tao will talk about an
		application of AIs induced by g-Expectation to illiquid markets.

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