

Curriculum Vitae

Patrick Cheridito

Department of Operations Research and Financial Engineering
Princeton University, Princeton, NJ 08544, USA
dito@princeton.edu
www.princeton.edu/~dito

Academic Appointments

Assistant professor in the Department of Operations Research and Financial Engineering, Princeton University	Sep 03 – present
Member of the Interdepartmental Committee of the Bendheim Center for Finance, Princeton University	Sep 03 – present
Associated Faculty of the Program for Computational and Applied Mathematics, Princeton University	Nov 07 – present
Research Fellow at the Bendheim Center for Finance, Princeton University	Sep 02 – Aug 03
Research Fellow at the Scuola Normale Superiore, Pisa	June – Aug 02
Research Fellow at the Mathematics Department, Universitat de Barcelona	March – May 02
Research Fellow at the Centre de Recherche en Economie et Statistique in Paris	Feb – March 02
Research Fellow at the Department of Financial and Actuarial Mathematics, TU Vienna	Oct 01 – Jan 02

Ph.D.

Ph.D. in Mathematics, ETH Zurich. Supervisor: Freddy Delbaen	2001
--	------

Awards

NSF Award DMS-0735404
NSF Career Award DMS-0642361
Alfred Rheinstein '11 Faculty Award 2006
Peek Junior Faculty Award 2006
NSF Award DMS-0505932
Research Fellowship of the Swiss National Science Foundation for the year 2002–03
Prize of the Dimitris N. Chorafas Foundation for the doctoral dissertation

Publications

- Cheridito, P., Li, T. (2008). Dual characterization of risk measures on Orlicz hearts. *forthcoming in Mathematics and Financial Economics*.
- Cheridito, P., Li, T. (2008). Risk measures on Orlicz hearts. *forthcoming in Mathematical Finance*.
- Cheridito, P., Filipovic, D., Kimmel, R.L. (2008). A note on the Dai–Singleton canonical representation of affine term structure models. *forthcoming in Mathematical Finance*.
- Cheridito, P., Soner, H.M., Touzi, N., Victoir, N. (2007). Second order backward stochastic differential equations and fully non-linear parabolic PDEs. *Communications on Pure and Applied Mathematics* 60(7), 1081–1110.
- Cheridito, P., Filipovic, D., Kimmel, R.L. (2007). Market price of risk specifications for affine models: theory and evidence. *Journal of Financial Economics* 83(1), 123–170.
- Cheridito, P., Delbaen, F., Kupper, M. (2006). Dynamic monetary risk measures for bounded discrete-time processes. *Electronic Journal of Probability* 11, 57–106.
- Cheridito, P., Delbaen, F., Kupper, M. (2006). Coherent and convex monetary risk measures for unbounded càdlàg processes. *Finance and Stochastics* 10(3), 427–448.
- Cheridito, P., Summer, C. (2006). Utility maximization under increasing risk aversion in one-period models. *Finance and Stochastics* 10(1), 147–158.
- Cheridito, P., Filipovic, D., Yor, M. (2005). Equivalent and absolutely continuous measure changes for jump-diffusion processes. *Annals of Applied Probability* 15(3), 1713–1732.
- Cheridito, P., Soner, H.M., Touzi, N. (2005). The multidimensional super-replication problem under gamma constraints. *Annales de l’Institut Henri Poincaré (C) Nonlinear Analysis* 22(5), 633–666.
- Cheridito, P., Soner, H.M., Touzi, N. (2005). Small time path behavior of double stochastic integrals and applications to stochastic control. *Annals of Applied Probability* 15(4), 2472–2495.
- Cheridito, P., Nualart, D. (2005). Stochastic integral of divergence type with respect to fractional Brownian motion with Hurst parameter H in $(0,1/2)$. *Annales de l’Institut Henri Poincaré (B) Probability and Statistics* 41(6), 1049–1081.
- Cheridito, P., Delbaen, F., Kupper, M. (2004). Coherent and convex monetary risk measures for bounded càdlàg processes. *Stoch. Proc. Appl.* 112(1), 1–22.
- Cheridito, P. (2003). Gaussian moving averages, semimartingales and option pricing. *Stoch. Proc. Appl.* 109(1), 47–68.
- Cheridito, P., Kawaguchi H., Maejima, M. (2003). Fractional Ornstein-Uhlenbeck processes. *Elect. J. Prob.* 8(3), 2003, p. 1–14.

- Cheridito, P. (2003). Arbitrage in fractional Brownian motion models. *Finance and Stochastics* 7(4), 533–553.
- Cheridito, P. (2003). Representations of Gaussian measures that are equivalent to Wiener measure. *Séminaire de Probabilités* Vol. XXXVII, 81–89, Springer Lecture Notes in Mathematics 1832.
- Cheridito, P. (2002). Sensitivity of the Black-Scholes option price to the local path behaviour of the stochastic process modelling the underlying asset *Proceedings of the Steklov Institute of Mathematics*, Vol. 237, 225–239.
- Cheridito, P. (2001). Mixed fractional Brownian motion. *Bernoulli* 7(6), 913–934.
- Cheridito, P. (2001). *Regularizing Fractional Brownian Motion With A View Towards Stock Price Modelling*. Diss. ETH No. 14051.

Preprints

- Cheridito, P., Kupper, M. (2008). Composition of time-consistent dynamic monetary risk measures in discrete time.
- Cheridito, P., Kupper, M. (2008). Recursiveness of indifference prices and translation-invariant preferences
- Cheridito, P., Stadje, M. (2008). Time-inconsistency of VaR and time-consistent alternatives.

Teaching Experience

Financial Risk Management, Princeton University, Undergraduate Level 2003 – 2006

Financial Risk Management, Princeton University, Master Level 2003 – 2008

Stochastic Calculus and Finance, Princeton University, Ph.D. Level 2004 – 2008

Stochastic Analysis Seminar, Princeton University, Ph.D. Level 2005

Ph.D. Supervision and Co-supervision

Alexander Wugalter, Princeton University, 2007 – 2011

Xin Tong, Princeton University, 2007 – 2011

Jared Klyman, Princeton University, 2006 – 2010

Mitja Stadje, Princeton University, 2005 – 2009

Michael Kupper, ETH Zurich, 2001 – 2005

Refereeing

Annals of Applied Probability, Annals of Probability, Annals of Finance, Bernoulli, Econometrica, Electronic Communications in Probability, Electronic Journal of Probability, Finance and Stochastics, Journal of Financial Econometrics, Lecture Notes in Mathematics, Mathematical Finance, Mathematics of Operation Research, Memoirs of the American Mathematical Society, Probability Theory and Related Fields, Review of Financial Studies, SIAM Journal on Optimization, Statistics and Decisions, Stochastic Processes and their Applications, Stochastics, Quantitative Finance

Grant Reviewing

Austrian Science Fund

National Science Foundation

National Security Agency

Professional Memberships

American Mathematical Society (AMS)

Institute for Operations Research and the Management Sciences (INFORMS)

Organizing

4th CCCP Mathematical Finance Workshop on Nov 30 - Dec 1, 2007 in Princeton