□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□□□

Professor Dr. Pairote SATTAYATHAM
School of Mathematics,
Suranaree University of Technology
Nakhon-Ratchasima 30000, Thailand.
Email: pairote@sut.ac.th
Tel./Fax: 044-2243315
Mobile: 0895849868 .
Website: www.risklabbkk.com

RESEARCH INTERESTS

Optimal Control Theory. Currently, I am interested in financial modeling, quantitative risk management, and actuarial mathematics.

Place of Birth: Chachoengsao, Thailand.

Nationality: Thai

EMPLOYMENT

1984: Assistant Professor in Mathematics, Srinakharinwirot University, Pitsanuloke, Thailand.
1989: Associate Professor in Mathematics, Thammasat University, Thailand.
2006: Professor in Mathematics. Suranaree University of technology, Thailand.
EDUCATION
B.A. (Mathematics), Thammasat Univeristy, Thailand.
M.Sc. (Mathematics), Chulalongkorn University, Thailand.
Ph.D (Mathematics), Chulalongkorn University, Thailand.

Ph.D. DISSERTATION SUPERVISED

1. Ms. Wei Wei, Periodic optimal control of systems governed by nonlinear evolution equations in Banach spaces, 2000.
2. Mr. Kiat Sangaroon, Existence of solutions for a class of semi linear integrodifferential equations of parabolic type with delay and optimal control, 2002.
3. Mr. Anusorn Chonweerayuth, A class of semi linear evolution equations and optimal control, 2002.
4. Ms. Rattikarn Saelim, On Some Fractional Stochastic Model in Finance, 2004.
5. Ms. Sujutra Hinpang , Infinite dimensional periodic systems with impulses 2007.
6. Ms. Porntip Pongchalee, Relaxed control for a class of semi linear impulsive evolution equations 2007.
7. Ms. Tidarut Plienpanich, On fractional stochastic filtering and application in Finance, 2008.
8. Mr. Arthit Intrasit, Option pricing for a fractional stochastic volatility with jumps, 2010.
9. Mr. Watcharin Klongdee, Minimum initial capital and value function problems in insurance, 2010.
10. Mr. Khanchit chuarkham, Control and minimum initial capital problems in non life insurance, 2011.
11. Ms. Sarisa Pinkham, Option pricing model for a stochastic volatility Levy process with stochastic interest rate. 2012
12.Ms. Nontiya Makate, Option pricing model for jump diffusion with stochastic volatility . (Expected 2012).
13.Ms. Tosporn Talangtham, Extreme value problem in insurance (Expected 2012)
14.Mr. Paiboon Peeraparp, Mathematics in finance (Expected 2012)
15. Mr. Nop Sopiphan, Forecast in FX market (Expected 2012)
16. Mr. Artit Intarasit, Calculating of solvency capital requirement for nonlife insurance (Expected 2013)

MASTER THESIS SUPERVISED

1. Mr. Kiat Sangaroon, Super Harmonic Functions in Banach Lattices, 1988.
2. Ms. Pensri Saechan, Functions That Preserve Harmonicity in the Euclidean Space, 1988.

3. Mr. Mangorm Suksan, Boundary Behavior of Green's functions, 1988.
4. Ms.Rattikarn Saelim, Expontial Stability and Stabilization of nonlinear Dynamic Systems, 2000.
5. Mr. Arthit Intrasit, Option Pricing Models Driven by a Fractional Levy Process, 2005.

COURSES TAUGHT

1. Computational finance (PhD)
2. Non-life insurance mathematics (PhD)
3. Financial time series (PhD)
4. Partial Differential Equation or Finance (PhD)
5. Stochastic Calculus (PhD)
6. Discrete time finance (PhD)
7. Loss Model (PhD)
8. Quantitative Risk Management (Ph.D)
9. Continuous time finance (Ph.D)
10. Financial optimization (Ph.D)

BOOK WRITTEN (in Thai)

1. Introduction to Differential Topology, Srinakharinwirot University Press, 1984, 150 pages.
2. Functions of Complex Variables, Department of mathematics, Thammasat University, 1987, 290 pages.
3. Advanced Calculus, Prakay Pruk Press, Bangkok, 1989, 217 pages.
4. Introduction to Partial Differential Equations. Chulalongkorn University Press, 1998, 522 pages.
5. Probability and Statistics. (in progress).
6. Partial Diff. eqn. with application in finance

REFEREED JOURNAL PAPERS (in mathematics)

1. P. Sattayatham. Some properties of solutions to semilinear heat equations. Proceeding of the Mathematical Research, Chiangmai Univ., Vol. 2, 26-28 (1992).
2. P. Sattayatham. The hyperplane mean of a non-negative subharmonic function. Science and Technology Journal, Thammasat University, Vol. 2, No.1, 1-7 (1993)
3. P. Sattayatham. On the functions that preserve harmonicity in the euclidean space. SEA Bull. Math., Vol. 17, No.1, 45-50 (1993)
4. P. Sattayatham. Semi-continuous functions in Banach Lattices. J. of Physical Science, USM, Malaysia, Vol.5, 103-116 (1994).
5. P. Sattayatham. Introduction to the Subject of Wavelets and PDEs, Proceedings of Annual Meeting in Mathematics, Khon Kaen University Press, Vol.1, 1-36 (1995).
6. B.I. Kvasov and P. Sattayatham. Generalized Tension B-splines. Proceedings of Chamonix 1996, Vanderbilt University Press USA, 1997, pp. 247-254.
7. E.B. Manoukian and P. Sattayatham. Particle correlation in quantum field theory II. Fortschr. Phys. (1998) 2, 189-200.
8. B.I. Kvasov and P. Sattayatham. GB-splines of Arbitrary Order. Journal of Computational and Applied Mathematics 104 (1999) 63-88.
9. P. Sattayatham. A convergence to infinity in Banach lattices. Thailand Journal of Mathematics, Vol 1, No. 1 (1999), pp. 15-23.
10. Y. Grigoriev, S.V. Meleshko, and P. Sattayatham. Classification of invariant solutions of the Boltmann equation. Journal of Physics A : Mathematical and General, Vol 32, No.28, 1999, pp. 337-342.
11. P. Sattayatham and Wei Wei. Use of cubic splines and the second central finite differences in numerical solution of PDEs. Journal of Interdisciplinary Mathematics, ,Vol.2 (1999), pp. 193-204.
12. P. Sattayatham and Kuang Huawu. Relaxation and Optimal Controls for a class of Infinite Dimensional Nonlinear Evolution Systems, Journal of Guizhou University, P.R.China, Vol.16, No. 4 (1999), pp.242-250.
13. P. Sattayatham. Generalized Discrete Tension Splines, Journal of Interdisciplinary Mathematics, Vol.3 (2000), No. 2-3, pp.163-172.
14. Wei Wei and P. Sattayatham. Anti-periodic solutions for a class of strangly nonlinear evolution equations in Banach spaces, Guizhou Science Journal, Vol.20, No.1, 2002, pp. 19-35.
15. Wei Wei and P. Sattayatham. On Existence of Optimal Control Governed by a Class of Periodic Nonlinear Evolution Systems on Banach spaces, Acta Analysis Functionals Applicata, Vol.4, No.2, 2002, pp. 124-136.
16. P. Sattayatham, S. Tangmanee and Wei Wei. On periodic solutions of nonlinear evolution equations in Banach spaces, Journal of Mathematical Analysis and Application, Vol.276, No.1, 2002, pp. 98-108.
17. X. Xiang, P. Sattayatham, and Wei Wei, Relaxed Optimal Controls of a Class of strongly nonlinear delay evolution equations, Journal of Nonlinear Analysis Theory, Methods and Applications, Vol.52, No.3, 2003, pp.703-723.
18. P. Sattayatham, R. Saelim, and S. Sujitjorn, Stability and Stabilization of Nonlinear Dynamical Systems. ASEAN Journal on Science and Technology for Development Vol. 20, Issue 1, pp 61-70, 2003.

19. P. Sattayatham, Strongly Nonlinear Impulsive Evolution Equations and Optimal Control. Journal of Nonlinear Analysis 57, pp 1005-1020, 2004.
20. K. Kerdprasop, N. Kerdprasop, and P. Sattayatham, Weighted K-means for density-biased clustering, DaWaK 2005, pp.488-497, 2005.
21. K. Kerdprasop, N. Kerdprasop, and P. Sattayatham, A Monte Carlo method to data stream analysia, Transaction on engineering, computing and technology, pp. 240-245, 2006.
22. P. Sattayatham, Relaxed control for a class of strongly nonlinear impulsive evolution equations. Computers and Mathematics with Applications, volume 52, issue 5, pages 779-790, 2006.
23. S. Hinpang, X. Xiang, and P. sattayatham, Impulsive control system with parameter perturbation, Thai Journal of mathematics, Vol. (4), No.1, pp. 1-18, 2006.
24. P. Pongchalee, P. sattayatham, and X. Xiang, Relaxation of nonlinear impulsive controlled systems on Banach space, Nonlinear Analysis 68(2008), 1570-1580.
25. P. Sattayatham, Relaxed control for a class of semilinear impulsive evolution equations, Pacific journal of Pure and Applied Mathematics, 1:1, pp. 68-80, 2008.
26. P. Sattayatham, Control of periodic impulsive system. Advanced in Differential and control Process, Vol. 2 ,No.1, 2008, pp. 61-74.

REFEREED JOURNAL PAPERS (In Mathematical Finance and Actuarial Mathematics)

1. P. Sattayatham, A. Intrasit, and P. Chaiyasena, A Fractional Black-Scholes Model with Jumps. Vietnam Journal of Mathematics, 35: 3(2007), 1-15
2.TH. Thao, T. Plienpanich, and P. Sattayatham, On the fractional Stochastic Filtering, Studia Mathematica, Vol LIII, No. 4, 2008
3. T. Plienpanich, P. Sattayatham, and T.H. Thao, Fractional Integrated GARCH Difusion Limit Model, Journal of Korean Statistical Society. 38(2009), 231-238.
4. A. Intarasit and P. Sattayatham, A Geometric Brownian Motion Model with Compound Poisson Process and Fractional Stochastic Volatility. Advanced and Applications in Statistics, Vol 16, 2010, pp. 25-47.
5. W. Klongdee, P. Sattayatham, K. Sangaroon, A Value Function of Discrete-time Surplus Process in Insurance under Risky Asset Investment and Reinsurance Credit Risk. Fareast Journal of Theoretical Statistics , Vol 32, 2010, pp. 183-198.
6. K. Chuarkham, P. Sattayatham and W. Klongdee, Controlling for a Discrete-time Surplus Process in Insurance to Reach a Firm's Target, Fareast Journal of Mathematical Science, 50(2011), 197-224.
7. P. Sattayatham and A. Intrasit, An Approximate Formula of European Option for Fractional Stochastic Volatility Jump Diffusion Model, Journal of Mathematics and Statistics, 7(3), (2011), 230-238.
8. N. Makate and P. Sattayatham, Stochastic Volatility Jump-difusion Model for option Pricing, Journal of Mathematical Finance, 1(3); 90-97, 2011.

9. S. Pinkham and P. Sattayatham, European Option Pricing for a Stochastic Volatility Model with Stochastic Interest Rates, Journal of Mathematical Finance, 1(3); 98-108, 2011.
10. P. Sattayatham and T. Talangtham, Fitting of finite mixture distributions to motor insurance claims, Journal of Mathematics and statistics, 8(1); 49-56, 2012.
11. P. Sattayatham and S. Pinkham, Option pricing for a stochastic levy model with stochastic interest rates, Journal of the Korean Statistical Society, Article in press, 2012.
12. N. Sopipan, P. Sattayatham and B. Premanode, Forecasting volatility of gold price using Markov regime switching and trading strategy, Journal of mathematical Finance, 2(1); 121-131, 2012.
13. P. Sattayatham, N. Sopipan and B. Premanode, Forecasting the stock exchange of Thailand uses day of the week effect and Markov regime switching GARCH, American Journal of Economic and Administration, 4(1); 84-93, 2012.

ADMINISTRATIVE EXPERIENCES

1. Associate to the Dean of Faculty of Science, Thammasat University, 1990-1991.
2. Chair of school of Mathematics, Suranaree University of Technology, 1993-1996
3. Vice Rector for Academic Affairs, Suranaree University of Technology, 2008-2009