

Jiro Akahori

Professor, Department of Mathematical Sciences, Ritsumeikan University
1-1-1 Noji-Higashi, Kusatsu, Shiga, 525-8577, Japan
akahori@se.ritsumei.ac.jp

+Born on June 10, 1967, Male, Japanese
+Ph. D in Mathematical Sciences, University of Tokyo, March 1997
+Lecturer (1998–2000), Associate Professor (2000–2008), Professor since April 2008, at Department of Mathematical Sciences, Ritsumeikan University
+Director of Research Center for Finance, Ritsumeikan University
+Vice President of Japanese Association of Financial Econometrics & Engineering since 2012
+Editor-in-Chief of *Asia Pacific Financial Markets* since 2006, (The official journal of Japanese Association of Financial Econometrics & Engineering, published from Springer)

Research interests

Probability Theory and Mathematical Finance.

Selected Publications

1. “An efficient weak Euler-Maruyama type approximation scheme of very high dimensional SDEs by orthogonal random variables” (with Masahiro Kinuya, Takashi Sawai, Tomooki Yuasa), *Mathematics and Computers in Simulation*, 2021, 187,540-565
2. “A Discrete-Time Clark-Ocone Formula and its Application to an Error Analysis”, (with Takafumi Amaba, Kaori Okuma), *Journal of Theoretical Probability* September 2017, Volume 30, Issue 3, pp 932–960
3. “A Heat Kernel Approach to Interest Rate Models”, (with Yuji Hishida, Josef Teichmann and Takahiro Tsuchiya) *Japan Journal of Industrial and Applied Mathematics* 31/ 2, 419-439, (2014)
4. “Tau functions of KP solitons realized in Wiener space”, (with Hidemi Aihara, Jiro Akahori, Hiroko Fujii, Yasuhumi Nitta) *Bulletin of the London Mathematical Society*, 45/ 6, 1301-1309 (2013)
5. Noises, stochastic flows, and E0-semigroups”, (with Masaki Izumi and Shinzo Watanabe), *Sūgaku* 59-3, 243–263, (2007).