

Nationality: Iranian
 Date and Place of Birth: 22 / 09 / 1980, Tehran (Iran)
 Present Position: Assistant professor
 Address: Math department of Modares university
 e-mail Address: tahmasebi@modares.ac.ir
 Ph.D. in Mathematics, Major: Stochastic SDEs, Sharif University of Technology (Tehran, Iran)
 Msc. in Mathematics, Major: Probability methods in Graph Theory, Sharif University of Technology(Tehran, Iran)
 B.S in Applied Mathematics, University of Shahid Beheshti(Tehran, Iran)

Title of research in Ph.D.: Malliavin Calculus and Numerical solution of SDEs with monotone drifts.

Research Interests:

Malliavin Calculus, Stochastic control, Financial Mathematics, Numerical Analysis of SDEs, Stochastic Analysis, Ordinary and Partial Stochastic differential Equations.

Lectures in Seminars

1. M. Tahmasebi and Sh. Zamani. *The Malliavin Calculus and Stochastic Differential Equations.* The 7th Seminar of Mathematical Analysis and its Applications, Arak university, Iran (23-24 Apr 2008).
2. M. Tahmasebi and Sh. Zamani, *The Malliavin Calculus and Numerical solution of Stochastic Differential Equations*, Shiraz university, Iran, The 3th Workshop in Applied Stochastic Processes (11-12 Jun 2008)
3. M. Tahmasebi and Sh. Zamani, *Weak Numerical Solution of Stochastic Differential Equations*, Isfahan university of Technology, Iran. The 8th Seminar of Differential Equation, Dynamical Systems and its Applications(19-21 Jul 2008).
4. M. Tahmasebi, *Malliavin Calculus and Applications*. Iran, Zanjan, Institute for Advanced Studies in Basic Sciences, (5 May 2010)
5. M. Tahmasebi, *Application of Malliavin Calculus for S.D.E. with Monotone Drift*. IPM, Tehran, Iran, The 6th International Iranian Workshop on Stochastic Processes (18-20 May 2010)
6. A. Bastani and M. Tahmasebi, *Strong Convergence of Split-Step Backward Euler Method for SDEs with Non-smooth Drift*. Iran University of Science and technology, The 7th International Iranian Workshop on Stochastic Processes (30 Nov and 1,2 Dec 2010)
7. M. Tahmasebi, *Malliavin Calculus Applied to Finance*. Zanjan, Iran, Institute for Advanced Studies in Basic Sciences, The 2th International Iranian Workshop on Mathematical Finance (17 Feb 2011)
- 8-M. Tahmasebi, *Malliavin Calculus for SDE with semi-monotone Drift*, IPM, Tehran, Iran, The 9th International Iranian Workshop on Stochastic Processes (25-27 Oct 2011)

Participating in Workshops, Competitions and Courses:

- The 34th Iranian Mathematics Conference, Shahrood, Iran (30 Aug-2 Sep 2003)
- The 25th and 26th Mathematics Competitions of IMS.Institute for Advanced Studies in Basic Science, Zanjan, Iran,
- Workshop on Stochastic Partial Differential Equations. Institute for Advanced Studies in Basic Science, Zanjan, Iran, (29 May- 7 June 2006)
- 2nd Workshop on Stochastic Processes, Department of Statistics, AUT (22-24 Oct 2007)
- Course of Malliavin Calculus : During in the second trip to Inria
- Course of Martingale Problems : During in the second trip to Inria

Teaching Experience

- (as Assistant Professor in Tarbiat Modares University)
- Real Analysis : Fall 2012-2013
 - Stochastic differential equations and stochastic control : Fall 2012-2013
 - Applied Functional Analysis : Spring 2013
 - Stochastic processes : Fall 2013-2014
 - Financial Math. : Spring 2014
 - Stochastic Differential Equations
 - Calculus I : Fall 2007 (in Alame university)
 - Differential Equation : Fall 2010 (in Sharif university of technology)
 - Engineering Mathematics : Spring 2011 (in Sharif university of technology)
 - Engineering Mathematics : Fal 2011 (in Sharf university of technology)

(as TA: tutorial and marking in Sharif university of technology)

- CalculusII : Spring 2005
- CalculusII : Spring 2006
- CalculusII : Spring 2007
- Real Analysis : Fall 2007
- Stochastic Process : Fall 2007
- Applied Stochastic Process : Fall 2008
- Stochastic Analysis : Spring 2008

(as TA: tutorial and marking) (Tarbiat Modares university)

- Probability Theory 2 : Spring 2011

(as TA: tutorial and marking) (Shahid Beheshti university)

- Probability Theory 2 : Spring 2011

Study Opportunities

- France, Sophia Antipolis, Inria 20 April- 30 May 2009
I was financially supported by France Inria Institute .
- France, Sophia Antipolis, Inria 1 Dec 2009- 15 Apr 2010
I was financially supported by France Inria Institute .

Publications

- **Strong Convergence of Split-Step Backward Euler Method for Stochastic Differential Equations with Non-Smooth Drift,**
Ali Foroush Bastani, Mahdieh Tahmasebi, *Journal of Computational and Applied Mathematics, Volume 236, Issue 7, January 2012, Pages 1903-1918.*
 - **Smooth density for the Solution of Scalar SDEs with Locally Lipschitz Coefficients under Hormander Condition,**
Mahdieh Tahmasebi, *Statistics & Probability Letters, Volume 85, February 2014, Pages 51-62.*
 - **Weak Differentiability of Solution to SDEs with Semi-monotone Drifts,**
Mahdieh Tahmasebi and Shiva Zamani, submitted.
 - **Integration by Parts Formula and Smoothness of Densities of Solutions to SDE's with Locally Lipschitz Coefficients,**
Mahdieh Tahmasebi and Shiva Zamani, submitted.
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