

Atilla Yılmaz

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Personal info

Born in Istanbul, 1980.

Academic degrees

1998. High school diploma, Robert College, Istanbul.

2003. B.S. in Electrical and Electronics Engineering, high honors, Boğaziçi University, Istanbul.

2003. B.S. in Mathematics, high honors, Boğaziçi University, Istanbul.

2005. M.S. in Mathematics, Courant Institute of Mathematical Sciences, New York University.

2008. Ph.D. in Mathematics, Courant Institute of Mathematical Sciences, New York University.

Advisor: S. R. Srinivasa Varadhan.

Academic positions

2003 – 2008. Research and Teaching Assistant, Department of Mathematics, Courant Institute.

2008 – 2009. Postdoctoral Fellow, Faculty of Mathematics, Weizmann Institute of Science, Rehovot.

2009 – . Morrey Assistant Professor, Department of Mathematics, University of California, Berkeley.

Fellowships and awards

2003. Rectorate Award, Boğaziçi University.

“Given to one member of the graduating class who, in addition to his superb academic performance, has contributed to the university community and society-at-large through extracurricular activities.”

2003. Dora Aksoy Award, Boğaziçi University.

“Given to the best graduating student of the Department of Mathematics.”

2003 – 2008. MacCracken Fellowship, New York University.

2008. Wilhelm Magnus Prize, Courant Institute.

“For significant contributions to the mathematical sciences.”

2008 – 2009. Postdoctoral Fellowship, Weizmann Institute.

Research interests

Probability theory; stochastic processes; statistical mechanics; partial differential equations; large deviations; random media; homogenization.

Publications and preprints

1. (A. Yılmaz) Large deviations for random walk in a space-time product environment.
Ann. Probab., **37**, 189–205, 2009.
2. (A. Yılmaz) Quenched large deviations for random walk in a random environment.
Comm. Pure Appl. Math., **62**, 1033–1075, 2009.
3. (A. Yılmaz) Averaged large deviations for random walk in a random environment.
Ann. Inst. H. Poincaré Probab. Statist., **46**, 853–868, 2010.
4. (A. Yılmaz) Equality of averaged and quenched large deviations for random walks in random environments in dimensions four and higher.
To appear in *Probab. Theory Related Fields*. DOI: 10.1007/s00440-010-0261-3
5. (A. Yılmaz, O. Zeitouni) Differing averaged and quenched large deviations for random walks in random environments in dimensions two and three.
Comm. Math. Phys., **300**, 243–271, 2010.
6. (A. Yılmaz) Harmonic functions, h-transform and large deviations for random walks in random environments in dimensions four and higher.
To appear in *Ann. Probab.* DOI: 10.1214/10-AOP556
7. (F. Rassoul-Agha, T. Seppäläinen, A. Yılmaz) Quenched large deviations for random walks in random environments and random potentials.
In preparation.

Teaching experience

Instructor at UC Berkeley — undergraduate level:

Introduction to Analysis (twice);
Introduction to Complex Analysis (twice);
Second Course in Analysis.

Instructor at UC Berkeley — graduate level:

Introduction to Topology and Analysis.

Instructor at Courant Institute — undergraduate level:

Calculus I.

Instructor at Courant Institute — graduate level:

Semester-long workshop on Ph.D. qualifying exams;
Mini workshop on Probability for M.S. students in Mathematical Finance (twice).

Teaching Assistant at Courant Institute — undergraduate level:

Calculus with Applications to Economics;
Computers in Biology and Medicine.

Teaching Assistant at Courant Institute — graduate level:

Introduction to Mathematical Analysis;
Complex Variables;
Advanced Linear Algebra;
Stochastic Calculus (three times).

Invited talks at seminars and conferences

- (07/2011) Conference in Honor of the 70th Birthday of S. R. S. Varadhan, National Taiwan University.
- (06/2011) Istanbul Statistical Physics Days, Sabancı University.
- (02/2011) Interacting Processes in Random Environments Conference, Fields Institute.
- (07/2010) Pacific Rim Conference on Mathematics, Stanford University.
- (06/2010) Mathematics Department Seminar, Boğaziçi University.
- (06/2010) Mathematics Research Seminar, Koç University.
- (06/2010) Mathematics Colloquium, Sabancı University.
- (03/2010) Seminar on Stochastic Processes, ETH Zürich.
- (03/2010) Probability Seminar, Stanford University.
- (02/2010) Probability Seminar, University of California, Berkeley.
- (10/2009) Mathematical Physics and Probability Seminar, University of California, Davis.
- (06/2009) Workshop: Random Walks in Random Environments, University of British Columbia.
- (06/2009) Dynamics Seminar, Hebrew University.
- (05/2009) Geometric Functional Analysis and Probability Seminar, Weizmann Institute.
- (12/2008) Seminar in Probability and Stochastic Processes, Technion.
- (12/2008) Mathematics Colloquium, Sabancı University.
- (12/2008) Mathematics Seminar, Istanbul Center for Mathematical Sciences.
- (12/2008) Mathematics Colloquium, Boğaziçi University.
- (04/2008) Mathematical Physics Seminar, University of Arizona.
- (03/2008) Probability and Mathematical Physics Seminar, Courant Institute.
- (01/2008) Geometric Functional Analysis and Probability Seminar, Weizmann Institute.
- (01/2008) Stochastics Seminar, University of Utah.

References

S. R. Srinivasa Varadhan, Professor of Mathematics, Courant Institute.
Email: varadhan@cims.nyu.edu

Gérard Ben Arous, Professor of Mathematics, Courant Institute.
Email: benarous@cims.nyu.edu

Ofer Zeitouni, Professor of Mathematics, University of Minnesota and Weizmann Institute.
Email: zeitouni@math.umn.edu

Fraydoun Rezakhanlou, Professor of Mathematics, University of California, Berkeley.
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