

# EUNGHYUN LEE

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<http://www.math.ucdavis.edu/~ehnlee>

## Education

- SEP 2011                      Ph.D. in Applied Mathematics, **University of California, Davis (UC Davis)**.  
*Advisor : Craig A. Tracy*
- AUG 2004                      M.S. in Applied Mathematics, **Korea Advanced Institute of Science and Technology (KAIST)**.  
*Advisor : Kil Hyun Kwon*
- FEB 2002                      B.S. in Physics and Mathematics, **Hanyang University, Seoul**.

## Research Interests

Probability, Statistical mechanics, Stochastic processes, Functional analysis, Quantum field theory

## Positions

- SEP 2011 – Present        Postdoctoral Researcher, Department of Mathematics and Statistics, University of Helsinki.
- SEP 2004 – AUG 2005    Intern Researcher, BK 21 Core Research Applied Analysis Team, KAIST, Korea

## Publications

3. **Lee, E.**, Transition probabilities of the Bethe ansatz solvable interacting particle systems, *J. Stat. Phys.*, Vol 142, 643 – 656 (2011).
2. **Lee, E.**, Distribution of a particle's position in the ASEP with the alternating initial condition, *J. Stat. Phys.*, Vol 140, 635 – 647 (2010).
1. *Hong, Y. M., Kim, J. M., Kwon, K. H., Lee, E. H.*, Channeled sampling in shift invariant subspaces, *Int. J. Wavelets Multiresolut. Inf. Process*, Vol 5, 753 – 767 (2007).

## Talks

### Conferences

- SEP 2011                      Prague summer school on mathematical statistical physics, Prague, Czech Republic.
- JUN 2011                      35th Conference on stochastic processes and their applications, Oaxaca, Mexico.

- MAR 2011 Seminar on stochastic processes 2011, UC Irvine, USA.  
 FEB 2011 29th Annual western states mathematical physics meeting, Caltech, USA.  
*(Invited)*  
 MAY 2005 KSIAM Spring 2005, Seoul national university, Korea.

### Other talks

- OCT 2011 Mathematical physics seminar, Department of Mathematics and Statistics,  
 University of Helsinki, Finland.  
 SEP 2011 Mathematical physics seminar, Department of Mathematics and Statistics,  
 University of Helsinki, Finland.  
 FEB 2011 Student-run math/applied math seminar, Department of Mathematics, UC  
 Davis, USA.  
 NOV 2008 Student-run math/applied math seminar, Department of Mathematics, UC  
 Davis, USA.  
 APR 2004 Invited lecture in a class, *mathematical modeling*, Department of Mathe-  
 matics, Hanyang University, Korea

### Academic Visit

- JAN 2004–JUN 2004 *Dr. Richard Staunton*, Department of engineering, University of War-  
 wick, UK.

### Awards and Fellowships

- JUN 2011 Graduate Student Association (GSA) Spring Travel award, UC Davis.  
 MAR 2011 Travel award for 35th Conference on stochastic processes and their appli-  
 cations, US National Science Foundation (NSF).  
 SEP 2004–AUG 2005 Research intern program fellowship, Korea Research Foundation (KRF).  
 JAN 2004–JUN 2006 International research internship program fellowship, Korea Science and  
 Engineering Foundation (KOSEF).

### Teaching

#### UC Davis(Instructor)

- Winter 2011 MAT16B Short Calculus (teaching evaluation 4.5/5.0)  
 Summer 2010 MAT21B Integral Calculus (teaching evaluation 4.7/5.0)  
 Spring 2010 MAT16A Short Calculus (teaching evaluation 4.2/5.0)  
 Summer 2009 MAT25 Advanced Calculus (teaching evaluation 4.5/5.0)  
 Summer 2007 MAT22B Differential Equations (teaching evaluation 4.3/5.0)

**UC Davis(Teaching assistant)**

Fall 2009	MAT235A Probability (graduate)
Winter 2009	MAT22B Differential Equations
Fall 2008	MAT108 Introduction to Abstract Mathematics
Spring 2008	MAT125B Real Analysis
Winter 2008	MAT21D Vector Calculus
Fall 2007	MAT21A Calculus
Spring 2007	MAT21C Calculus
Winter 2007	MAT21A Calculus
Fall 2006	MAT16A Short Calculus, MAT129 Fourier Analysis

**KAIST(Teaching assistant)**

Fall 2003	Analysis
Spring 2003	Applied Analysis
Fall 2002	Analysis
Spring 2002	Linear Algebra

**References**

- **Craig A. Tracy** (PhD thesis advisor): tracy@math.ucdavis.edu  
Department of Mathematics, University of California, Davis.
- **Alexander Soshnikov**: soshniko@math.ucdavis.edu  
Department of Mathematics, University of California, Davis.
- **Bruno Nachtergaele**: bxn@math.ucdavis.edu  
Department of Mathematics, University of California, Davis.
- **Antti Kupiainen**: antti.kupiainen@helsinki.fi  
Department of Mathematics and Statistics, University of Helsinki, Finland.
- **Qinglan Xia** (Teaching): qlxia@math.ucdavis.edu  
Department of Mathematics, University of California, Davis.
- **Kil Hyun Kwon** (MS thesis advisor): khkwon@kaist.edu  
Department of Mathematical Sciences, Korea Advanced Institute of Science and Technology.