

Stefanie Kosuch

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Application for PostDoc Position

Professional Experience

Research

Oct. 2007 - present	Université Paris Sud, France Ph.D. student at the LRI
September 2008	Chinese University of Hong Kong Research visit at the SEEM
July/August 2007	Université Paris VI, France Research internship at the LIP6
Nov. 2006 - June 2007	Universität Hamburg, Germany Diploma student in the research group of Reinhard Diestel

Teaching

2007 - present	Graduate Teaching Assistant at the Université Paris Sud, France: <ul style="list-style-type: none">✓ Graph Theory (School of Engineering (4th year): lecture, exercises)✓ Algorithmics and Complexity (School of Engineering (3rd year) & Undergraduate course (3rd year): exercises)✓ Introduction to language translation (Undergraduate course (2nd year): exercises, Lex/Yacc laboratories)✓ Imperative Programming (Undergraduate course (1st year): C programming laboratories)
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Other

- Member of the Organizing Committee for the [8th French Combinatorial Conference](#)
- Reviewer for [Mathematical Programming \(Series A\)](#)

Awards and Scholarships

- 2007 - 2010 **Allocation MENRT**
Scholarship of the French Ministry of National Education, Research and Technology for a three-year doctoral program
- 2005 - 2006 **DAAD: Jahresstipendien für Studierende aller Fächer**
Scholarship of the [Deutscher Akademischer Austausch Dienst](#) for a one-year study abroad program
- 2002 **DPG Buchpreis**
Award of the [Deutsche Physikalische Gesellschaft](#) for excellent school achievements in physics

Education

- 10/2007 - present **Ph.D. studies in Computer Science**
Université Paris Sud, France
- Ph.D. supervisor: Abdel Lisser
 - Subject: "Stochastic Combinatorial Optimization"
 - Thesis defense expected in September 2010
- 10/2002 - 08/2007 **Diploma studies in Mathematics
(Diplomstudiengang Mathematik)**
Universität Hamburg, Germany
- Minor: Physics
 - Diploma thesis in Graph Theory
 - Final Grade: "excellent"
- 09/2005 - 05/2006 **Studies abroad: M.Sc. Mathematics**
Université de Montréal, Canada
- Concentration: Applied Mathematics
- 06/2002 **Abitur (University Entrance Qualification)**
Gymnasium Hittfeld, Seevetal, Germany
- Final Grade: "excellent"

Skills

Programming Languages: C, C++, MATLAB, PHP

Operating systems: Windows, Linux

Languages: German (native), English (fluent), French (fluent)

List of Publications

Publications in scientific journals (peer-reviewed)

- [1] H. Bruhn, S. K., M. Win Myint: *Bicycles and left-right tours in locally finite graphs*. European Journal of Combinatorics 30 (2009), 356-371. [[link to pdf](#)]
- [2] S. K. and A. Lisser: *Upper bounds for the 0-1 stochastic knapsack problem and a B&B algorithm*. Annals of Operations Research (Online First) (2009), <http://dx.doi.org/10.1007/s10479-009-0577-5>.
[A more recent version by S. Kosuch (with a little bit more insight information and some important corrections made) can be found at <http://www.kosuch.eu/stefanie/veroeffentlichungen/SRKP.pdf>].
- [3] S. K. and A. Lisser: *On Two-Stage Stochastic Knapsack Problems with or without Probability Constraint*. Discrete Applied Mathematics (2010). To appear. [[link to latest version](#)]

Extended abstracts, published or accepted for publication (peer-reviewed)

- [4] S. K., P. Le Bodic, J. Leung, A. Lisser: *On a stochastic bilevel programming problem with knapsack constraints*. Proc. of the Intern. Network Optimization Conf. (2009), 356-371. [[link to pdf](#)]
- [5] S. K. and A. Lisser: *On a Two-Stage Stochastic Knapsack Problem with Probabilistic Constraint*. Proc. of the 8th Cologne Twente Workshop on Graphs and Combinatorial Optimization (2009), <http://www.lix.polytechnique.fr/ctw09/ctw09-proceedings.pdf>.
- [6] S. K. and A. Lisser: *Stochastic Shortest Path Problem with Delay Excess Penalty*. Proc. of the Intern. Symposium on Combinatorial Optimization (2010). To appear in Electronic Notes of Discrete Mathematics. [[link to pdf](#)]

Selected published abstracts

- [7] S. K., M. Letournel, A. Lisser: *Stochastic Knapsack Problem with Continuous Distributions*. 20th International Symposium of Mathematical Programming (2009), Chicago, USA.
- [8] S. K. and M. Latapy: *Modèle multiparti pour les grands graphes de terrain*. 9èmes Journées Graphes et Algorithmes (2007), Paris, France, <http://www.liafa.jussieu.fr/jga07/JGA07.pdf>.

Submitted papers

- [9] S. K., P. Le Bodic, J. Leung, A. Lisser: *On a Stochastic Bilevel Programming Problem with Knapsack Constraints*. (2009) (In Revision). [[link to pre-revision version](#)]

List of Publications (continued)*Papers in preparation*

- [10] S. K., M. Letournel, A. Lisser: *Calculating upper bounds for a branch-and-bound framework to solve the Expectation Constrained Stochastic Knapsack Problem.* (2010).