

# Konstantinos Chatzikokolakis

## Curriculum Vitæ

**Address:** LIX, École Polytechnique,  
1 rue Honoré d'Estienne d'Orves,  
91120 Palaiseau, France

**Date of birth:** 23/9/1980

**Nationality:** Greek

**Email:** `kostas at chatzi.org`

**Web:** <http://www.lix.polytechnique.fr/~kostas/>

### Employment

---

**1st Grade Researcher (CR1, tenured)**

2015 - ...

CNRS & LIX, École Polytechnique of Paris  
Inria team Comète

**2nd Grade Researcher (CR2, tenured)**

2011 - 2014

CNRS & LIX, École Polytechnique of Paris  
Inria team Comète

**Post-doctoral Researcher**

2008 - 2010

Eindhoven University of Technology  
Team of Sandro Etalle

**Post-doctoral Researcher**

2007 - 2008

Oxford Computing Laboratory  
Team of Marta Kwiatkowska

### Education

---

**PhD in Computer Science**

2004 - 2007

*University:* Ecole Polytechnique of Paris

*Supervisor:* Catuscia Palamidessi

*Title:* Probabilistic and information-theoretic approaches to anonymity [pdf]

*Defense:* 26 October 2007

*Reviewers:* Michael Mislove, Mogens Nielsen, Mark Ryan

*Examiners:* Roberto Amadio, Cédric Fournet, Laurent Fribourg, Christine Paulin

*Grade:* Très honorable

*Distinctions:* Second SPECIF/"Gilles Kahn" price, 2008

**Master (DEA) "Programming: Semantics, Proofs and Languages" 2003 - 2004***University:* University of Paris-VII*Thesis:* Specification and verification of probabilistic security protocols. Supervised by Catuscia Palamidessi*Grade:* 16.8/20 (highest honor)**Bachelor in Computer Science and Telecommunications 1998 - 2003***University:* National University of Athens*Thesis:* Constructive and reперative search for constraint satisfaction problems. Supervised by Panagiotis Stamatopoulos*Grade:* 8.6/10 (highest honor)**Major Research Interests**

---

- Security & Privacy, including (but not limited to):
  - Quantitative information flow
  - Location privacy
  - Differential privacy
  - Formal verification of security systems
- Probabilistic model checking
- Concurrency theory

**Distinctions**

---

**NSA Best Scientific Cybersecurity Paper award 2015**

For the paper: M. Alvim, K. Chatzikokolakis, A. McIver, C. Morgan, C. Palamidessi, G. Smith. Additive and multiplicative notions of leakage, and their capacities. *Proc. of CSF '14 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 308-322, 2014. [[report](#)]

**Second SPECIF/"Gilles Kahn" prize 2008**

Annual prize of excellence for french PhD theses organised by the SPECIF society and the French Academy of Sciences.

**Distinctions of PhD theses (co-)supervised by me**

- [ACM SIGSAC Doctoral Dissertation Award](#), 2015. For the thesis of Nicolás Bordenabe.
- Prix de thèse Ecole Polytechnique, 2015. For the thesis of Nicolás Bordenabe.

## Editorial Activity

---

- Editorial board member of the newly established [Proceedings on Privacy Enhancing Technologies](#) (PoPETs), a scholarly journal for timely research papers on privacy. 2015-16.
- Co-editor (with Sebastian Mödersheim and Catuscia Palamidess) of the special issue of the [Journal of Computer Security](#) (JCS) dedicated to selected papers of [TOSCA 2011](#) and [SecCo 2011](#).
- Co-editor (with Veronique Cortier) of the proceedings of [SecCo 2010](#). [EPTCS 51](#), Open Publishing Association, Pages 1-57, 2011.

## Program Committees

---

PC member of highly reputed conferences in the areas of Security & Privacy (PETS, CSF, POST), Databases (ICDE), Web technologies (WWW), Programming languages (ESOP), Formal methods (ICFEM), etc.

## International Conferences and Symposia

- [ICDE 2017](#): IEEE International Conference on Data Engineering
- [CSF 2017](#): 30th IEEE Computer Security Foundations Symposium
- [POST 2017](#): 6th International Conference on Principles of Security and Trust
- [WWW 2016](#): 25th World Wide Web conference
- [PETS 2016](#): The 16th Privacy Enhancing Technologies Symposium
- [ICISSP 2015](#): 1st International Conference on Information Systems Security and Privacy
- [PETS 2015](#): The 15th Privacy Enhancing Technologies Symposium
- [ICFEM 2014](#): The 6th International Conference on Formal Engineering Methods
- [PETS 2014](#): The 14th Privacy Enhancing Technologies Symposium
- [ISPEC 2013](#): 9th International Conference on Information Security Practice and Experience
- [ESOP 2012](#): 21st European Symposium on Programming
- [TGC 2012](#): 7th International Symposium on Trustworthy Global Computing
- [ISPEC 2012](#): 8th International Conference on Information Security Practice and Experience
- [TGC 2011](#): 6th International Symposium on Trustworthy Global Computing
- [TCS 2010](#): 6th IFIP International Conference on Theoretical Computer Science
- [MFPS 2009](#): 25th Conference on the Mathematical Foundations of Programming Semantics

## International Workshops

- [HotSpot 2018](#): 6th Workshop on Hot Issues in Security Principles and Trust
- [BMDA 2018](#): International Workshop on Big Mobility Data Analytics
- [QAPL 2018](#): 16th Workshop on Quantitative Aspects of Programming Languages and Systems
- [APVP 2017](#): 8ème Atelier sur la Protection de la Vie Privée
- [BIGQP 2017](#): International Workshop on Big Geo Data Quality and Privacy (co-located with [EDBT/ICDT'17](#))

- [APVP 2016](#): 7ème Atelier sur la Protection de la Vie Privée
- [FCS 2015](#): Workshop on Foundations of Computer Security
- [TPDP 2015](#): 1st workshop on the Theory and Practice of Differential Privacy
- [QAPL 2015](#): 13th Workshop on Quantitative Aspects of Programming Languages
- [APVP 2015](#): 6ème Atelier sur la Protection de la Vie Privée
- [HotPETs 2014](#): 7th Workshop on Hot Topics in Privacy Enhancing Technologies
- [QAPL 2014](#): 12th Workshop on Quantitative Aspects of Programming Languages
- [HotPETs 2013](#): 6th Workshop on Hot Topics in Privacy Enhancing Technologies
- [QAPL 2013](#): 11th Workshop on Quantitative Aspects of Programming Languages
- [APVP 2014](#): 5ème Atelier sur la Protection de la Vie Privée
- [QAPL 2012](#): 10th Workshop on Quantitative Aspects of Programming Languages
- [SecCo 2011](#) (co-chair): 9th International Workshop on Security Issues in Concurrency
- [FAST 2011](#): 8th International Workshop on Formal Aspects of Security & Trust
- [QAPL 2011](#): 9th Workshop on Quantitative Aspects of Programming Languages
- [SecCo 2010](#) (co-chair): 8th International Workshop on Security Issues in Concurrency
- [FCS-PrivMod 2010](#): Workshop on Foundations of Security and Privacy
- [QAPL 2010](#): 8th Workshop on Quantitative Aspects of Programming Languages
- [SecCo 2008](#): 6th International Workshop on Security Issues in Concurrency

## Software

---

### Location Guard

<https://github.com/chatziko/location-guard>

Location Guard is a browser extension that allows to protect your location while using location-aware websites, by adding controlled noise to it. It supports Chrome, Firefox (both desktop and Android) and Opera. **60k daily active users.**

In the press:

- [Mozilla Add-ons Blog](#): Pick of the month, Jun 2015
- [Windows Forest](#): Presentation of Location Guard (japanese), Jun 2015
- [Korben](#): Géolocalisation – Restez maître de votre situation (french), Mar 2015
- [gHacks Technology News](#): Change your location in Firefox using Location Guard, Dec 2014

### libqif

<https://github.com/chatziko/libqif>

libqif is a Quantitative Information Flow C++ toolkit library, implementing a variety of techniques and algorithms from the area of quantitative information flow and differential privacy.

**LCI**<https://github.com/chatziko/lci>

LCI is an interpreter for the lambda calculus. It supports many advanced features such as recursion, user-defined operators and multiple evaluation strategies, all based on the pure calculus.

**Invited speaker / seminars / tutorials / panels / popularization**

---

- Invited speaker, [UCL Theory of Big Data](#), UCL, UK, June 2017
- Invited speaker, [Big Geo Data Quality and Privacy \(BIGQP'17\)](#), co-located with [EDBT/ICDT'17](#), Mar 2017
- [ACE Seminar](#), UCL, UK, Oct 2016.
- [Security seminar](#), LORIA, Nov 2015.
- Speaker at the round table "Security & Privacy : challenges of the future digital society", [Forum STIC](#), University of Paris-Saclay, Dec 2014.
- Popularization talk "Protection de la vie privée et anonymat", [Journée ISN](#), Académie de Créteil, Mar 2014.
- [DIMACS Working Group on Measuring Anonymity](#), Rutgers University, US, May 2013.
- [Dagstuhl seminar on Quantitative Security Analysis](#), Schloss Dagstuhl, Germany, Nov 2012.
- Popularization talk "La protection de la vie privée dans le monde numérique", [Débat citoyen](#), Inria, Nov 2012.
- [Shonan seminar on Quantitative Methods in Security and Safety Critical Applications](#), Shonan Village, Japan, Nov 2012.
- [Quantum and Classical Information Flow](#), Bellairs Research Center, Barbados, Apr 2011.
- Popularization talk "Anonymes sur internet?", Unithé ou Café?, Parc Orsay Université, Apr 2011.
- [Workshop on Informatic Phenomena](#), New Orleans, Oct 2008.
- [Logic, Physics and Quantum Information Theory](#), Bellairs Research Center, Barbados, Mar 2008.
- [Taiwanese-French Conference on Information Technology](#), Taipei, Taiwan, Mar 2008.
- [Dagstuhl seminar on Formal Protocol Verification Applied](#), Schloss Dagstuhl, Germany, Oct 2007.
- [Two Decades of Probabilistic Verification - Reflections and Perspectives](#) (junior researcher session), Leiden, Netherlands, Oct 2007.
- [Mathematical Methods for Reasoning about Security](#), Bellairs Research Center, Barbados, Mar 2007.

**Projects**

---

**LOGIS****2016 - ...**

Principal investigator. Financed by the Japan Society for the Promotion of Science (JSPS) and Inria. *Logical and Formal Methods for Information Security*. This project aims at integrating the logical / formal approaches to verifying security properties with (A) complexity theory and (B) information theory. *Partners*: France: Inria, ENS Cachan. Japan: Keio University, AIST, JAIST, University of Tokyo.

**REPAS****2016 - ...**

Financed by the french National Agency for Research (ANR). *Reliable and Privacy-Aware Software Systems via Bisimulation Metrics*. The project aims at investigating quantitative notions and tools for proving program correctness and protecting privacy, focusing on bisimulation metrics, the natural extension of bisimulation on quantitative systems. A key application is to develop mechanisms to protect the privacy of users when their location traces are collected. *Partners*: Inria (Comète, Focus), ENS Cachan, ENS Lyon, University of Bologna.

**Privacy-Friendly Services and Apps****2014 - ...**

Financed by Microsoft Research Lab. The objective of this project is to re-imagine how modern on-line services and applications may be engineered to provide a higher degree of technical privacy protection. *Partners*: Inria, Microsoft Cambridge, Microsoft France.

**CAPPRIS****2013 - 2016**

Financed by Inria. *Collaborative Action on the Protection of Privacy Rights in the Information Society*. The goal of this project is to study the challenges related to privacy in the modern information society, trying to consider not only the technical, but also the social and legal ones, and to develop methods to enhance the privacy protection. *Partners*: Inria (Saclay, Sophia-Antipolis, Rennes and Grenoble), CNRS-LAAS, Eurecom, University of Namur. Besides computer scientists, the consortium also includes experts in sociology and in law.

**MEALS****2012 - 2015**

Financed by the FP7 Marie Curie's IRSES program. *Mobility between Europe and Argentina applying Logic to Systems*. *Partners*: Saarland University, Germany. Rheinisch-Westfälische Technische Hochschule Aachen, Germany. Technische Universität Dresden, Germany. Inria, France. Imperial College, UK, University of Leicester, UK. Technische Universiteit Eindhoven, NL. Universidad Nacional de Cordoba, AR. Universidad de Buenos Aires, AR.

**PRINCESS****2012 - 2015**

Financed by Inria. *Privacy in Data Access*. The project focuses on the protection of privacy and confidential information. *Partners*: Inria Futurs, Florida International University, University of Pennsylvania.

**PEARL****2007 - 2011**

Financed by STW/Sentinels. *Privacy Enhanced security Architecture for RFID Labels*. The goal of the project was to develop practical security controls for RFID-based systems, and a corresponding assessment methodology.

**Printemps****2006 - 2007**

*PRobability and INformation ThEory for Modeling anonymity, Privacy, and Secrecy*. Teams involved: Inria Futurs, McGill University (p.i. P. Panangaden).

**ProNoBiS****2006 - 2007**

*Probability and Nondeterminism, Bisimulations and Security*. Main partners: ENS Cachan, Inria Futurs, PPS, University of Oxford, Università di Verona.

**ACI Rossignol****2003 - 2006**

Verification of Cryptographic Protocols. Teams involved: LIF, Inria Futurs, LSV, VERIMAG.

**Supervision of Students**

---

**PhD students**

- **2016 - ... : Tymofii Prokopenko**

Ecole Polytechnique. Grant Digiteo-DigiCosme. Co-supervised with Serge Haddad and Catuscia Palamidessi.

- **2015 - ... : Joris Lamare**

Ecole Polytechnique. Co-supervised with Catuscia Palamidessi.

- **2012 - 2015 : Marco Stronati**

Designing Location Privacy Mechanisms for flexibility over time and space. Ecole Polytechnique, Grant EDX Monge. Co-supervised with Catuscia Palamidessi. Defended on Sep 25, 2015. [[pdf](#)]

- **2011 - 2014 : Nicolás Bordenabe**

Measuring Privacy with Distinguishability Metrics: Definitions, Mechanisms and Application to Location Privacy. Ecole Polytechnique, Grant Inria/DGA. Co-supervised with Catuscia Palamidessi. Defended on Sep 12, 2014. [[pdf](#)]

**Awards:**

- [ACM SIGSAC Doctoral Dissertation Award](#), 2015
- PhD thesis prize (prix de thèse) of Ecole Polytechnique, 2015

- **2011 - 2014 : Lili Xu**

Formal Verification of Differential Privacy in Concurrent Systems. Inria, Grant ANR LOCALI. Co-supervised with Huimin Lin and Catuscia Palamidessi. Defended on May 4th, 2015. [[pdf](#)]

### Master students / interns

- **2016, Romain du Marais:** Ecole Polytechnique.
- **2016, Anna Pazii:** Inria. Co-supervised with Catuscia Palamidessi.
- **2016, Susheel Suresh:** Ecole Polytechnique.
- **2016, Tymofii Prokopenko:** Inria. Co-supervised with Catuscia Palamidessi.
- **2014, Raphaelle Crubillé:** ENS Lyon. Co-supervised with Myrto Arapinis.
- **2013, Xiao Wang:** Ecole Polytechnique. Co-supervised with Catuscia Palamidessi.
- **2012, Fernán Martinelli:** University of Rio Cuarto. Co-supervised with Catuscia Palamidessi.

### Teaching

---

- **2017 - 2018:** Foundations of privacy, [MPRI](#), France  
(Parisian Master of Research in Computer Science: master program co-organized by several universities around Paris.)
- **2016 - 2017:** Foundations of privacy, [MPRI](#), France
- **2015 - 2016:** Foundations of privacy, [MPRI](#), France
- **Oct 2015:** Security & Information flow, [ICTAC 2015 Summer school](#), Cali, Colombia
- **2014 - 2015:** Probabilistic concurrency and applications to security, [MPRI](#), France
- **2013 - 2014:** Probabilistic concurrency and applications to security, [MPRI](#), France
- **2012 - 2013:** Probabilistic concurrency and applications to security, [MPRI](#), France
- **Feb 2012:** Quantitative Information Flow and Differential Privacy, [Rio Summer school](#), Rio Cuarto, Argentina
- **2011 - 2012:** Probabilistic concurrency and applications to security, [MPRI](#), France
- **2009 - 2010:** Verification of security protocols, [Information Security Technology Master](#), TU/e, Eindhoven, The Netherlands
- **2008 - 2009:** Verification of security protocols, [Information Security Technology Master](#), TU/e, Eindhoven, The Netherlands

### Publications

---

#### Journals (peer-reviewed)

- [1] K. Chatzikokolakis, E. ElSalamouny, C. Palamidessi, A. Pazii. Methods for Location Privacy: A comparative overview. *Foundations and Trends in Privacy and Security*, 1(4): 199-257, 2017. [\[report\]](#)



- [2] K. Chatzikokolakis, E. ElSalamouny, C. Palamidessi. Efficient Utility Improvement for Location Privacy. *Proceedings on Privacy Enhancing Technologies*, 2017(4): 308-328, 2017. [[report](#)]
- [3] Y. Kawamoto, K. Chatzikokolakis, C. Palamidessi. On the Compositionality of Quantitative Information Flow. *Logical Methods in Computer Science*, 13(3:11): 1-31, 2017. [[report](#)]
- [4] K. Chatzikokolakis, C. Palamidessi, C. Braun. Compositional Methods for Information-Hiding. *Mathematical Structures in Computer Science*, 26(6): 908-932, 2016. [[report](#)]
- [5] K. Chatzikokolakis, C. Palamidessi, M. Stronati. Constructing elastic distinguishability metrics for location privacy. *Proceedings on Privacy Enhancing Technologies*, 2015(2): 156-170, 2015. [[report](#)]
- [6] M. Alvim, M. Andres, K. Chatzikokolakis, P. Degano, C. Palamidessi. On the information leakage of differentially-private mechanisms. *Journal of Computer Security*, 23(4): 427-469, 2015. [[report](#)]
- [7] K. Chatzikokolakis, S. Knight, C. Palamidessi, P. Panangaden. Epistemic Strategies and Games on Concurrent Processes. *ACM Transactions on Computational Logic*, 13(4): 28:1-28:35, 2012. [[report](#)]
- [8] K. Chatzikokolakis, C. Palamidessi. Making Random Choices Invisible to the Scheduler. *Information and Computation*, 208(6): 694-715, 2010. [[report](#)]
- [9] K. Chatzikokolakis, C. Palamidessi, P. Panangaden. On the Bayes Risk in Information-Hiding Protocols. *Journal of Computer Security*, 16(5): 531-571, 2008. [[report](#)]
- [10] K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Anonymity Protocols as Noisy Channels. *Information and Computation*, 206: 378-401, 2008. [[report](#)]
- [11] K. Chatzikokolakis, C. Palamidessi. A Framework to Analyze Probabilistic Protocols and its Application to the Partial Secrets Exchange. *Theoretical Computer Science*, 389: 512-527, 2007. [[report](#)]
- [12] K. Chatzikokolakis, C. Palamidessi. Probable innocence revisited. *Theoretical Computer Science*, 367(1-2): 123-138, 2006. [[report](#)]

### Book Chapters

- [13] E. ElSalamouny, K. Chatzikokolakis, C. Palamidessi. Generalized Differential Privacy: Regions of Priors That Admit Robust Optimal Mechanisms. *Horizons of the Mind. A Tribute to Prakash Panangaden*, Springer, LNCS 8464, pp. 292-318, 2014. [[report](#)]
- [14] M. Alvim, M. Andres, K. Chatzikokolakis, C. Palamidessi. Quantitative Information Flow and Applications to Differential Privacy. *FOSAD Tutorial Lectures*, Springer, LNCS 6858, pp. 211-230, 2011 [[report](#)]

**International Conferences and Workshops (peer-reviewed)**

- [15] M. Alvim, K. Chatzikokolakis, Y. Kawamoto, C. Palamidessi. Leakage and Protocol Composition in a Game-Theoretic Perspective. *Proc. of POST '18 (International Conference on Principles of Security and Trust)*, Springer, to appear, 2018.
- [16] M. Alvim, K. Chatzikokolakis, Y. Kawamoto, C. Palamidessi. Information Leakage Games. *Proc. of GameSec '17 (Conference on Decision and Game Theory for Security)*, Springer, LNCS 10575, pp. 437-457, 2017. [[report](#)]
- [17] K. Chatzikokolakis, S. Haddad, A. Kassem, C. Palamidessi. Trading Optimality for Performance in Location Privacy (extended abstract). *Proc. of VALUETOOLS'17 (11th EAI International Conference on Performance Evaluation Methodologies and Tools)*, to appear, 2017. [[report](#)]
- [18] M. Alvim, K. Chatzikokolakis, A. McIver, C. Morgan, C. Palamidessi, G. Smith. Axioms for Information Leakage. *Proc. of CSF '16 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 77-92, 2016. [[report](#)]
- [19] K. Chatzikokolakis, C. Palamidessi, V. Vignudelli. Up-to techniques for generalized bisimulation metrics. *Proc. of CONCUR '16 (Conference on Concurrency Theory)*, LIPIcs, Vol. 59, pp. 35:1–35:14, 2016. [[report](#)]
- [20] N. Bordenabe, K. Chatzikokolakis, C. Palamidessi. Optimal Geo-Indistinguishable Mechanisms for Location Privacy. *Proc. of CCS '14 (ACM Conference on Computer and Communications Security)*, ACM, pp. 251-262, 2014. [[report](#)]
- [21] K. Chatzikokolakis, D. Gebler, C. Palamidessi, L. Xu. Generalized bisimulation metrics. *Proc. of CONCUR '14 (Conference on Concurrency Theory)*, Springer, LNCS 8704, pp. 32-46, 2014. [[report](#)]
- [22] Y. Kawamoto, K. Chatzikokolakis, C. Palamidessi. Compositionality Results for Quantitative Information Flow. *Proc. of QEST '14 (International Conference on Quantitative Evaluation of Systems)*, Springer, LNCS 8657, pp. 368-383, 2014. [[report](#)]
- [23] K. Chatzikokolakis, C. Palamidessi, M. Stronati. A Predictive Differentially-Private Mechanism for Mobility Traces. *Proc. of PETS '14 (Privacy Enhancing Technologies Symposium)*, Springer, LNCS 8555, pp. 21-41, 2014. [[report](#)]
- [24] M. Alvim, K. Chatzikokolakis, A. McIver, C. Morgan, C. Palamidessi, G. Smith. Additive and multiplicative notions of leakage, and their capacities. *Proc. of CSF '14 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 308-322, 2014. [[report](#)]  
**Winner of the NSA 3rd Annual Best Scientific Cybersecurity Paper Competition.**
- [25] L. Xu, K. Chatzikokolakis, H. Lin. Metrics for Differential Privacy in Concurrent Systems. *Proc. of FORTE '14 (IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems)*, Springer, LNCS 8461, pp. 199-215, 2014. [[report](#)]
- [26] M. Andres, N. Bordenabe, K. Chatzikokolakis, C. Palamidessi. Geo-Indistinguishability: Differential Privacy for Location-Based Systems. *Proc. of CCS '13 (ACM Conference on Computer and Communications Security)*, ACM, pp. 901-914, 2013. [[report](#)]

- [27] K. Chatzikokolakis, M. Andres, N. Bordenabe, C. Palamidessi. Broadening the Scope of Differential Privacy Using Metrics. *Proc. of PETS '13 (Privacy Enhancing Technologies Symposium)*, Springer, LNCS 7981, pp. 82-102, 2013. [[report](#)]
- [28] E. ElSalamouny, K. Chatzikokolakis, C. Palamidessi. A differentially private mechanism of optimal utility for a region of priors. *Proc. of POST '13 (Conference on Principles of Security and Trust)*, Springer, LNCS 7796, pp. 41-62, 2013. [[report](#)]
- [29] M. Alvim, K. Chatzikokolakis, C. Palamidessi, G. Smith. Measuring Information Leakage using Generalized Gain Functions. *Proc. of CSF '12 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 265-279, 2012. [[report](#)]
- [30] M. Bruso, K. Chatzikokolakis, S. Etalle, J. den Hartog. Linking unlinkability. *Proc. of TGC '12 (Symposium on Trustworthy Global Computing)*, Springer, LNCS 8191, pp. 129-144, 2013. [[report](#)]
- [31] M. Alvim, M. Andres, K. Chatzikokolakis, C. Palamidessi. On the Relation between Differential Privacy and Quantitative Information Flow. *Proc. of ICALP '11 (Colloquium on Automata, Languages and Programming)*, Springer, LNCS 6756, pp. 60-76, 2011. [[report](#)]
- [32] M. Alvim, M. Andres, K. Chatzikokolakis, P. Degano, C. Palamidessi. Differential Privacy: on the trade-off between Utility and Information Leakage. *Proc. of FAST '11 (Workshop on Formal Aspects in Security and Trust)*, Springer, LNCS 7140, pp. 39-54, 2011. [[report](#)]
- [33] Mayla Bruso, K. Chatzikokolakis, J. den Hartog. Formal verification of privacy for RFID systems. *Proc. of CSF '10 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 75-88, 2010. [[report](#)]
- [34] K. Chatzikokolakis, T. Chothia, A. Guha. Statistical Measurement of Information Leakage. *Proc. of TACAS '10 (Conference on Tools and Algorithms for the Construction and Analysis of Systems)*, Springer, LNCS 6015, pp. 390-404, 2010. [[report](#)]
- [35] C. Braun, K. Chatzikokolakis, C. Palamidessi. Quantitative notions of leakage for one-try attacks. *Proc. of MFPS '09 (Conference on the Mathematical Foundations of Programming Semantics)*, Elsevier, ENTCS 248, pp. 75-91, 2009. [[report](#)]
- [36] K. Chatzikokolakis, G. Norman, D. Parker. Bisimulation for demonic schedulers. *Proc. of FoS-SaCS '09 (Conference on Foundations of Software Science and Computation Structures)*, Springer, LNCS 5504, pp. 318-332, 2009. [[report](#)]
- [37] K. Chatzikokolakis, S. Knight, P. Panangaden. Epistemic Strategies and Games on Concurrent Processes. *Proc. of SOFSEM '09 (Conference on Current Trends in Theory and Practice of Computer Science)*, Springer, LNCS 5404, pp. 153-166, 2009. [[report](#)]
- [38] K. Chatzikokolakis, K. Martin. A Monotonicity Principle for Information Theory. *Proc. of MFPS '08 (Conference on the Mathematical Foundations of Programming Semantics)*, Elsevier, ENTCS 218, pp. 111-129, 2008. [[report](#)]
- [39] C. Braun, K. Chatzikokolakis, C. Palamidessi. Compositional Methods for Information-Hiding. *Proc. of FoSSaCS '08 (Conference on Foundations of Software Science and Computation Structures)*, Springer, LNCS 4962, pp. 443-457, 2008. [[report](#)]

- [40] K. Chatzikokolakis, C. Palamidessi. Making Random Choices Invisible to the Scheduler. *Proc. of CONCUR '07 (Conference on Concurrency Theory)*, Springer, LNCS 4703, pp. 42-58, 2007. [[report](#)]
- [41] K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Probability of Error in Information-Hiding Protocols. *Proc. of CSF '07 (IEEE Computer Security Foundations Symposium)*, IEEE Computer Society Press, pp. 341-354, 2007. [[report](#)]
- [42] K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Anonymity Protocols as Noisy Channels. *Proc. TGC '06 (Symposium on Trustworthy Global Computing)*, Springer, LNCS 4661, pp. 281-300, 2006. [[report](#)]
- [43] T. Chothia, K. Chatzikokolakis. A Survey of Anonymous Peer-to-Peer File-Sharing. *Proc. of NCUS '05 (Symposium on Network-Centric Ubiquitous Systems)*, Springer, LNCS 3823, pp. 744-755, 2005. [[report](#)]
- [44] K. Chatzikokolakis, C. Palamidessi. Probable Innocence Revisited. *Proc. of FAST '05 (Workshop on Formal Aspects in Security and Trust)*, Springer, LNCS 3866, pp. 142-157, 2005. [[report](#)]
- [45] K. Chatzikokolakis, C. Palamidessi. A Framework to Analyze Probabilistic Protocols and its Application to the Partial Secrets Exchange. *Proc. TGC '05 (Symposium on Trustworthy Global Computing)*, Springer, LNCS 3705, pp. 146-162, 2005. [[report](#)]

#### **Invited (editor reviewed) & National Conferences**

- [46] K. Chatzikokolakis, C. Palamidessi, M. Stronati. Location privacy via geo-indistinguishability. *ACM SIGLOG News*, 2(3): 46-69, 2015.
- [47] K. Chatzikokolakis, C. Palamidessi, M. Stronati. Geo-indistinguishability: A Principled Approach to Location Privacy. *Proc. of ICDCIT '15 (International Conference on Distributed Computing and Internet Technology)*, Springer, LNCS 8956, pp. 49-72, 2015. [[report](#)]
- [48] K. Chatzikokolakis, C. Palamidessi, M. Stronati. Location privacy via geo-indistinguishability. *Proc. of ICTAC '15 (International Colloquium on the Theoretical Aspects of Computing)*, pp 28-38, 2015.
- [49] R. Beauxis, K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Formal approaches to Information-Hiding – A tutorial. *Proc. TGC '07 (Symposium on Trustworthy Global Computing)*, Springer, LNCS 4912, pp. 347-362, 2008. [[report](#)]
- [50] K. Chatzikokolakis, G. Boukeas, P. Stamatopoulos. Construction and Repair: A Hybrid Approach to Search in CSPs *Proc. of SETN '04 (Hellenic Conference on Artificial Intelligence)*, Springer, LNAI 3025, pp. 342-351, 2004. [[report](#)]

### Edited Volumes

- [51] K. Chatzikokolakis, S. A. Mödersheim, C. Palamidessi, J. Pang (Editors). Foundational aspects of security (special issue with selected articles from TOSCA 2011 and kai SecCo 2011). *Journal of Computer Security*, 22(2), 2014.
- [52] K. Chatzikokolakis, V. Cortier (Editors). *Proc. of SecCo '10 (8th International Workshop on Security Issues in Concurrency)*, Paris, France, 30th August 2010. EPTCS 51, 2010.

### Thesis

- [53] K. Chatzikokolakis. Probabilistic and Information-Theoretic Approaches to Anonymity. PhD Thesis, Ecole Polytechnique, 2007. [[pdf](#)]