

# List of Publications of Catuscia Palamidessi

January 23, 2019

## 1 Journals

1. M. Alvim, K. Chatzikokolakis, Y. Kawamoto, C. Palamidessi: A Game-Theoretic Approach to Information-Flow Control via Protocol Composition. *Entropy* 20(5), MDPI, pp. 382, 2018. [[http](#)]
2. Y. Kawamoto, K. Chatzikokolakis, C. Palamidessi: On the Compositionality of Quantitative Information Flow. *Logical Methods in Computer Science* 13(3:11), pp. 1-31, 2017. [[http](#)]
3. K. Chatzikokolakis, E. ElSalamouny, C. Palamidessi and Anna Pazii. Methods for Location Privacy: A comparative overview. *Foundations and Trends in Privacy and Security* 1(4): 199-257, 2017. [[http](#)]
4. K. Chatzikokolakis, E. ElSalamouny, C. Palamidessi. Efficient Utility Improvement for Location Privacy. *PoPETs* 2017 (4), De Gruyter Open, 308-328, 2017. [[http](#)]
5. S. Hamadou, C. Palamidessi, V. Sassone: Quantifying leakage in the presence of unreliable sources of information. *J. Comput. Syst. Sci.* 88: 27-52, 2017. [[http](#)]
6. K. Chatzikokolakis, C. Palamidessi, and C. Braun. Compositional methods for information-hiding. *Mathematical Structures in Computer Science*, 26(6): 908-932, 2016. [[bib](#) , [http](#)]
7. K. Chatzikokolakis, C. Palamidessi, M. Stronati. Constructing elastic distinguishability metrics for location privacy. *PoPETs* 2015(2): 156-170, 2015. [[http](#)]
8. M. Falaschi, C. Olarte, C. Palamidessi. Abstract Interpretation of Temporal Concurrent Constraint Programs. *Theory and Practice of Logic Programming* CUP. 15(3): 312-357, 2015. [[http](#)]
9. M. Alvim, M. Andrés, K. Chatzikokolakis, P. Degano, C. Palamidessi. On the information leakage of differentially-private mechanisms. *Journal of Computer Security*. 23(4): 427-469, 2015. [[http](#)]
10. K. Chatzikokolakis, S. Knight, C. Palamidessi, and P. Panangaden. Epistemic Strategies and Games on Concurrent Processes. *Transactions on Computational Logic*, 13(4): 28:1-28:35, 2012. [[bib](#) , [http](#)]
11. M.S. Alvim, M.E. Andrés, and C. Palamidessi. Information Flow in Interactive Systems. *Journal of Computer Security*, 20(1): 3-50, 2012. [[bib](#) , [http](#)]
12. M.E. Andrés, Catuscia Palamidessi, Ana Sokolova, and Peter VanRossum. Information Hiding in Probabilistic Concurrent Systems. *Theoretical Computer Science*, 412(28): 3072-3089, 2011. [[bib](#) , [http](#)]
13. K. Chatzikokolakis, C. Palamidessi. Making Random Choices Invisible to the Scheduler. *Information and Computation*, 208(6): 694-715, 2010. [[bib](#) , [DOI](#) , [http](#) , [.pdf](#)]
14. S. Kramer, C. Palamidessi, R. Segala, A. Turrini, and C. Braun. A quantitative doxastic logic for probabilistic processes and applications to information-hiding. *The Journal of Applied Non-Classical Logics*, 19(4): 489-516, 2009. [[bib](#) , [DOI](#) , [http](#)]
15. D. Cacciagrano, F. Corradini, and C. Palamidessi. Explicit fairness in testing semantics. *Logical Methods in Computer Science*, 5(2-15), 2009. [[bib](#) , [http](#)]
16. R. Beauxis and C. Palamidessi Probabilistic and nondeterministic aspects of anonymity. *Theoretical Computer Science*, 410: 4006-4025, 2009. [[bib](#) , [DOI](#) , [http](#) , [.pdf](#)]

17. G. Norman, C. Palamidessi, D. Parker, P. Wu. Model checking probabilistic and stochastic extensions of the  $\pi$ -calculus. *IEEE Transactions of Software Engineering* 35(2): 209-223, 2009. [[bib](#) , [http](#) , [.pdf](#)]
18. K. Chatzikokolakis, C. Palamidessi, P. Panangaden. On the bayes risk in information-hiding protocols. *Journal of Computer Security*, 16(5): 531-571, 2008. [[pdf](#)]
19. K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Anonymity protocols as noisy channels. *Information and Computation*, 206(2-4):378-401, 2008. [[pdf](#)]
20. K. Chatzikokolakis, C. Palamidessi. A Framework to Analyze Probabilistic Protocols and its Application to the Partial Secrets Exchange. *Theoretical Computer Science*, 389(3):512-527, 2007. [[pdf](#)]
21. I. Phillips, M.G. Vigliotti, C. Palamidessi. Expressiveness via leader election problems. *Theoretical Computer Science*, 388(1-3): 267-289, 2007. [[pdf](#)]
22. D. Cacciagrano, F. Corradini, C. Palamidessi. Separation of synchronous and asynchronous communication via testing. *Theoretical Computer Science*, 386(3): 218-235, 2007. [[pdf](#)]
23. Y. Deng, C. Palamidessi. Axiomatizations for probabilistic finite-state behaviors. *Theoretical Computer Science*. 373(1-2): 92-114, 2007. [[pdf](#)]
24. K. Chatzikokolakis, C. Palamidessi. Probable Innocence Revisited. *Theoretical Computer Science*, 367(1-2): 123-138, 2006. [[pdf](#)]
25. C. Palamidessi, M. O. Herescu. A randomized encoding of the  $\pi$ -calculus with mixed choice. *Theoretical Computer Science*. 335(2-3): 373-404, 2005. [Report version: [pdf](#), [ps](#)]
26. C. Palamidessi. Comparing the Expressive Power of the Synchronous and the Asynchronous  $\pi$ -calculus. *Mathematical Structures in Computer Science*, 13(5): 685-719, 2003. [[pdf](#), [ps](#)]
27. R. McDowell, D. Miller, C. Palamidessi. Encoding Transition Systems in Sequent Calculus. *Theoretical Computer Science*, 294(3): 411-437, 2003. [[Abstract](#), [ps](#)]
28. M. Nielsen, C. Palamidessi, F.D. Valencia. Temporal Concurrent Constraint Programming: Denotation, Logic and Applications. *Nordic Journal of Computing*, 9(1): 145-188, 2002. [[ps](#)]
29. D. Miller, C. Palamidessi. Foundational Aspects of Syntax. *ACM Computing Surveys*, 31(3es): 11, 1999. [[ps](#)]
30. F.S. de Boer, M. Gabbrielli, E. Marchiori, C. Palamidessi. Proving Concurrent Constraint Programs Correct. *ACM-TOPLAS*, 19(5): 685-725, 1998. [[Abstract](#), [ps](#)]
31. M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi. Confluence in Concurrent Constraint Programming. *Theoretical Computer Science*, 183(2): 281-315, 1997. [[Abstract](#), [ps](#)]
32. M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi. Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators. *Information and Computation*, 137(1): 41-67, 1997. [[ps](#)]
33. A. Cortesi, G. Filé, R. Giacobazzi, F. Ranzato, C. Palamidessi. Complementation in Abstract Interpretation. *ACM-TOPLAS*, 19(1): 7-47, 1997. [[Abstract](#), [ps](#)]
34. F.S. de Boer, A. Di Pierro, C. Palamidessi. An algebraic perspective of constraint logic programming. *Journal of Logic and Computation*, 7(1): 1-38, 1997. [[Abstract](#), [ps](#)]
35. R. Giacobazzi, F. Ranzato, C. Palamidessi. Weak Relative Pseudo-Complements of Closure Operators. *Algebra Universalis*, 36(3): 405-412, 1996. [[Abstract](#), [ps](#)]
36. F.S. de Boer, A. Di Pierro, C. Palamidessi. Infinite computations in nondeterministic constraint programming. *Theoretical Computer Science*, 151(1): 37-78, 1995. [[Abstract](#), [ps](#)]
37. A. Di Pierro, M. Martelli, C. Palamidessi. Negation as Instantiation. *Information and Computation*, 120(2): 263-278, 1995. [[Abstract](#), [ps](#)]
38. K.R. Apt, E. Marchiori, C. Palamidessi. A Declarative Approach for First-Order Built-in's of Prolog. *Applicable Algebra in Engineering, Communication and Computing*, 5(3/4): 159-191, 1994. [[Abstract](#), [ps](#)]

39. F.S. de Boer, C. Palamidessi. Embedding as a Tool for Language Comparison. *Information and Computation*. 108(1): 128-157, 1994. [[Abstract](#), [ps](#)]
40. M. Falaschi, G. Levi, M. Martelli, C. Palamidessi. A model-theoretic reconstruction of the operational semantics of logic programs. *Information and Computation*, 103(1): 86-113, 1993. [[Abstract](#), [pdf](#)]
41. S. Haridi, S. Janson, C. Palamidessi. Structural transformational semantics for Kernel Andorra Prolog. *Future Generation Computer Systems*, 8(4): 409-421, 1992.
42. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. From failure to success: Comparing a denotational and a declarative semantics for Horn Clause Logic. *Theoretical Computer Science*, 101(2): 239-263, 1992.
43. P.G. Bosco, E. Giovannetti, C. Moiso, C. Palamidessi. Logic programming with equations. *Journal of Logic Programming*, 11(1): 85-89, 1991.
44. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. Semantic models for Concurrent Logic Languages. *Theoretical Computer Science*, 86(1): 3-33, 1991.
45. E. Giovannetti, G. Levi, C. Moiso, C. Palamidessi. Kernel LEAF: a logic plus functional language. *Journal of Computer and System Sciences*, 42(2): 139-185, 1991. [[Abstract](#), [pdf](#)]
46. M. Falaschi, G. Levi, M. Martelli, C. Palamidessi. Declarative modeling of the operational behaviour of logic languages. *Theoretical Computer Science*, 69(3): 289-318, 1989. [[Abstract](#), [pdf](#)]
47. G. Levi, C. Palamidessi. Contributions to the semantics of logic perpetual processes. *Acta Informatica*, 25(6): 691-711, 1988.
48. M. Falaschi, G. Levi, C. Palamidessi. A synchronization logic: Axiomatics and formal semantics of generalized Horn clauses. *Information and Control*, 60(1-3): 36-69, 1984.

## 2 Proceedings of conferences and workshops

1. M. Alvim, K. Chatzikokolakis, C. Palamidessi, A. Pazzi. Metric-based local differential privacy for statistical applications. *Proc. of CSF*, IEEE, 262-267, 2018. [[http](#)]
2. M. Alvim, K. Chatzikokolakis, Y. Kawamoto, C. Palamidessi. Leakage and Protocol Composition in a Game-Theoretic Perspective. *Proc. of POST, LNCS 10804*, Springer, 134-159, 2018. [[http](#)]
3. V. Castiglioni, K. Chatzikokolakis, C. Palamidessi. A Logical Characterization of Differential Privacy via Behavioral Metrics. *Proc. of FACS, LNCS 11222*, Springer, 75-96, 2018. [[http](#)]
4. L. Kacem, C. Palamidessi. Geometric Noise for Locally Private Counting Queries. *Proc. of PLAS 2018*, ACM, 13-16, 2018. [[http](#)]
5. C. Palamidessi, M. Romanelli. Feature selection with Rényi min-entropy. *Proc. of ANNPR, LNCS 11081*, Springer, 226-239, 2018. [[http](#)]
6. K. Chatzikokolakis, S. Haddad, A. Kassem, C. Palamidessi. Trading Optimality for Performance in Location Privacy. *Proc. of ValueTool*, ACM, 2017. [[http](#)]
7. M. Alvim, K. Chatzikokolakis, Y. Kawamoto, C. Palamidessi. Information Leakage Games. *Proc. of GameSec, LNCS 10575*, Springer, 437-457, 2017. [[http](#)]
8. K. Chatzikokolakis, C. Palamidessi, V. Vignudelli. Up-To Techniques for Generalized Bisimulation Metrics. *Proc. of CONCUR, LIPIcs 59*: 35:1-35:14, 2016. [[http](#)]
9. M. Alvim, K. Chatzikokolakis, A. McIver, C. Morgan, C. Palamidessi, G. Smith. Axioms for Information Leakage. *Proc. of CSF*, IEEE, 77-92, 2016. [[http](#)]
10. M. Falaschi, M. Gabrielli, C. Olarte, C. Palamidessi. Slicing Concurrent Constraint Programs. *Proc. of LOPSTR, LNCS 10184*, Springer, 76-93, 2016. [[http](#)]

11. K. Chatzikokolakis, C. Palamidessi, M. Stronati. Geo-indistinguishability: A Principled Approach to Location Privacy. *Proc. of ICDCIT, LNCS 8956*, Springer, 49-72, 2015. [[http](#)]
12. K. Chatzikokolakis, C. Palamidessi, M. Stronati. Location Privacy via Geo-Indistinguishability. *Proc. of ICTAC, LNCS 9399*, Springer, 28-38, 2015. [[http](#)]
13. N. Bordenabe, K. Chatzikokolakis, C. Palamidessi. Optimal Geo-Indistinguishable Mechanisms for Location Privacy. *Proc. of CCS, ACM*, 251-262, 2014. [[http](#)]
14. K. Chatzikokolakis, D. Gebler, C. Palamidessi, L. Xu. Generalized Bisimulation Metrics. *Proc. of CONCUR, LNCS 8704*, Springer, 32-46, 2014. [[http](#)]
15. K. Chatzikokolakis, C. Palamidessi, M. Stronati. A Predictive Differentially-Private Mechanism for Mobility Traces. *Proc. of PETS, LNCS 8555*, Springer, 21-41, 2014. [[http](#)]
16. Y. Kawamoto, K. Chatzikokolakis, C. Palamidessi. Compositionality Results for Quantitative Information Flow. *Proc. of QEST, LNCS 8657*, Springer, 368-383, 2014. [[http](#)]
17. M. Alvim, K. Chatzikokolakis, A. Mciver, C. Morgan, C. Palamidessi, G. Smith. Additive and multiplicative notions of leakage, and their capacities. *Proc. of CSF, IEEE*, 308-322, 2014. [[http](#)]
18. M. Andrés, N. Bordenabe, K. Chatzikokolakis, C. Palamidessi. Geo-Indistinguishability: Differential Privacy for Location-Based Systems. *Proc. of CCS, ACM*, 901-914, 2013. [[http](#)]
19. K. Chatzikokolakis, M. Andrés, N. Bordenabe, C. Palamidessi. Broadening the Scope of Differential Privacy Using Metrics. *Proc. of PETS, LNCS 7981*, Springer, 82-102, 2013. [[http](#)]
20. I. Gazeau, D. Miller, C. Palamidessi. Preserving differential privacy under finite-precision semantics. *Proc. of QAPL. EPTCS 117*, 1-18, 2013. [[http](#)]
21. E. Elsalamouny, K. Chatzikokolakis, and C. Palamidessi. A differentially private mechanism of optimal utility for a region of priors. *Post-proc. of POST. LNCS 7796*, Springer, 41-62, 2013. [[bib](#) , [http](#)]
22. S. Knight, C. Palamidessi, P. Panangaden, and F.D. Valencia. Spatial and Epistemic Modalities in Constraint-Based Process Calculi. *Proc. of CONCUR, LNCS 7454*, Springer, 317-332, 2012. [[bib](#) , [http](#)]
23. M. Giunti, C. Palamidessi, and F.D. Valencia. Hide and New in the Pi-Calculus. *Proc. of EXPRESS/SOS. EPTCS 85*, 65-80, 2012. [[bib](#) , [http](#)]
24. I. Gazeau, D. Miller, and C. Palamidessi. A non-local method for robustness analysis of floating point programs. *Proc. of QAPL. EPTCS 85*, 63-76, 2012. [[bib](#) , [http](#)]
25. C. Palamidessi and M. Stronati. Differential privacy for relational algebra: improving the sensitivity bounds via constraint systems. *Proc. of QAPL, EPTCS 85*, 92-105, 2012. [[bib](#) , [http](#)]
26. M.S. Alvim, K. Chatzikokolakis, C. Palamidessi, and G. Smith. Measuring Information Leakage using Generalized Gain Functions. *Proc. of CSF, IEEE*, 265-279, 2012. [[bib](#) , [http](#)]
27. M.S. Alvim, M.E. Andrés, K. Chatzikokolakis, P. Degano, and C. Palamidessi. Differential Privacy: on the trade-off between Utility and Information Leakage. *Proc. of FAST, LNCS 7140*, Springer. 39-54, 2011. [[bib](#) , [http](#)]
28. M.S. Alvim, M.E. Andrés, K. Chatzikokolakis, and C. Palamidessi. On the relation between Differential Privacy and Quantitative Information Flow. In *Proc. of ICALP, LNCS 6756*, Springer. 60-76, 2011. [[bib](#) , [DOI](#) , [http](#)]
29. A.A. Aristizábal, F. Bonchi, C. Palamidessi, L. Pino, and F.D. Valencia. Deriving labels and bisimilarity for concurrent constraint programming. *Proc. of FoSSaCS. LNCS 6604*, Springer. 138-152. 2011. [[bib](#) , [http](#)]
30. M.S. Alvim, M.E. Andrés, C. Palamidessi, and P. VanRossum. Safe equivalences for security properties. *Proc. of TCS, IFIP Advances in Information and Communication Technology 323*, Springer, 55-70, 2010. [[bib](#) , [DOI](#) , [http](#)]
31. M.E. Andrés, C. Palamidessi, P. VanRossum, and A. Sokolova. Information hiding in probabilistic concurrent systems. *Proc. of QEST, IEEE*, 17-26, 2010. [[bib](#) , [DOI](#) , [http](#)]

32. M.S. Alvim, M.E. Andrés, and C. Palamidessi. Information flow in interactive systems. *Proc. of CONCUR 2010, LNCS 6269*, Springer, 102-116, 2010. [[bib](#) , [DOI](#) , [http](#)]
33. D. Chiarugi, M. Falaschi, C. Olarte, and C. Palamidessi. Compositional modelling of signalling pathways in timed concurrent constraint programming. *Proc. of BCB, ACM*, 414-417, 2010. [[bib](#) , [DOI](#) , [http](#)]
34. S. Hamadou, V. Sassone, and C. Palamidessi. Reconciling belief and vulnerability in information flow. *Proc. of the Symposium on Security and Privacy, IEEE*, 79-92, 2010. [[bib](#) , [DOI](#) , [http](#)]
35. M.S. Alvim, M.E. Andrés, and C. Palamidessi. Probabilistic information flow. *Proc. of LICS, IEEE*, 314-321, 2010. [[bib](#) , [DOI](#) , [http](#)]
36. S. Hamadou, C. Palamidessi, V. Sassone, and E. ElSalamouny. Probable innocence in the presence of independent knowledge. *Proc. of FAST'09, LNCS 5983*, Springer, 141-156, 2010. [[bib](#) , [DOI](#) , [http](#)]
37. M.E. Andrés, C. Palamidessi, P. van Rossum, and G. Smith. Computing the leakage of information-hiding systems. *Proc. of TACAS'10, LNCS 6015*, Springer, 373-389, 2010. [[bib](#) , [DOI](#) , [http](#)]
38. M. Falaschi, C. Olarte, and C. Palamidessi. A framework for abstract interpretation of timed concurrent constraint programs. *Proc. of PPDP'09, ACM*, 207-218, 2009. [[bib](#) , [DOI](#) , [http](#)]
39. C. Braun, K. Chatzikokolakis, and C. Palamidessi. Quantitative notions of leakage for one-try attacks. *Proc. of MFPS 25, ENTCS 249*, Elsevier B.V., 75-91, 2009. [[bib](#) , [DOI](#) , [http](#)]
40. A. Bhowmick, C. Palamidessi. Bounds on the leakage of the input's distribution in information-hiding protocols. *Proc. of TGC'08. LNCS 5474*, Springer, 36-51, 2009. [[bib](#) , [http](#) , [.pdf](#) , [full version](#)]
41. C. Braun, K. Chatzikokolakis, C. Palamidessi. Compositional methods for information-hiding. In *Proc. of FOS-SACS'08, LNCS 4962*, Springer, 443-457, 2008. [[pdf](#)]
42. R. Beauxis, K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Formal approaches to information-hiding (tutorial). In *Proc. of TGC'07, LNCS 4912*, Springer, 347-362, 2008. [[pdf](#)]
43. J. Goubault-Larrecq, C. Palamidessi, A. Troina. A probabilistic applied pi-calculus. In *Proc. of APLAS'07, LNCS 4807*, Springer, 175-190, 2007. [[pdf](#)]
44. K. Chatzikokolakis, C. Palamidessi. Making Random Choices Invisible to the Scheduler. In *Proc. of CONCUR'07, LNCS 4703*, Springer, 42-58, 2007. [[pdf of report version](#)]
45. K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Probability of Error in Information-Hiding Protocols. *Proc. of CSF, IEEE Comp. Soc.*, 341-354, 2007. [[pdf of report version](#)]
46. G. Norman, C. Palamidessi, D. Parker, P. Wu. Model checking the probabilistic pi-calculus. *Proc. of QEST'07. IEEE Computer Society*, 169-178, 2007. [[pdf](#)]
47. P. Wu, C. Palamidessi, H. Lin. Symbolic Bisimulations for Probabilistic Systems. *Proc. of QEST'07. IEEE Computer Society*, 179-188, 2007. [[pdf](#)]
48. C. Olarte, C. Palamidessi, F. Valencia. Universal Timed Concurrent Constraint Programming. *Proc. of ICLP'07. LNCS 4670*, Springer, 464-465. 2007. [[pdf](#)]
49. M. Falaschi, C. Olarte, C. Palamidessi, F. Valencia. Declarative Diagnosis of Temporal Concurrent Constraint Programs. *Proc. of ICLP'07 LNCS 4670*, Springer, 271-285. 2007. [[pdf](#)]
50. J. Aranda, C. Di Giusto, C. Palamidessi, F. Valencia. Expressiveness of recursion, replication and scope mechanisms in process calculi. In *Proc. of FMCO'06, LNCS, 4709*, Springer, 185-206, 2007. [[pdf](#)]
51. K. Chatzikokolakis, C. Palamidessi, P. Panangaden. Anonymity Protocols as Noisy Channels. *Proc. of TGC'06, LNCS 4661*, Springer, 281-300, 2006. [[pdf](#) , [pdf of report version](#)]
52. D. Cacciagrano, F. Corradini, C. Palamidessi. Fair  $\pi$ . In *Proc. of EXPRESS'06, ENTCS 175 (3)*, Elsevier Science B.V., 3-26, 2007. [[pdf](#)]

53. S. Pradalier, C. Palamidessi. Expressiveness of probabilistic  $\pi$ -calculi. In *Proc. of QAPL'06, ENTCS 164(3)*, Elsevier Science B.V., 119-136, 2006. [[pdf](#)]
54. C. Palamidessi, I. Phillips, M.G. Vigliotti. Expressiveness via leader election problems. In *Postproc. of FMCO'05, LNCS 4111*, Springer, 172-194, 2005. [[pdf](#)]
55. H.A. López, C. Palamidessi, J.A. Pérez, C. Rueda, and F. Valencia. A declarative framework for security: Secure concurrent constraint programming. In *Proc. of ICLP'06, LNCS 4079*, Springer, 449-450, 2006.
56. C. Palamidessi, V. Saraswat, F. Valencia, B. Victor. On the expressiveness of linearity vs persistence in the asynchronous pi-calculus. In *Proc. of LICS'06, IEEE*, 59-68, 2006. [[pdf](#)]
57. K. Chatzikokolakis, C. Palamidessi. Probable innocence revisited. *Proc. of FAST'05, LNCS 3866*, ©Springer, 142-157, 2006. [[pdf](#)]
58. A. Ziegler, D. Miller, C. Palamidessi. A congruence format for name-passing calculi. In *Proc. of SOS'05, ENTCS 156*, Elsevier Science B.V., 169-189, 2006 [[pdf](#)]
59. C. Palamidessi. Anonymity in probabilistic and nondeterministic systems. In *Proc. of APC 25 (2005), ENTCS 162*, Elsevier Science B.V., 277-279, 2006. [[pdf](#)]
60. C. Palamidessi. Probabilistic and nondeterministic aspects of anonymity. In *Proc. of MFPS XXI (2005), ENTCS 155*, Elsevier Science B.V., 33-42, 2006. [[pdf](#)]
61. D. Cacciagrano, F. Corradini, C. Palamidessi. Separation of synchronous and asynchronous communication via testing. *Proc. of EXPRESS'05, ENTCS 154*, Elsevier Science B.V., 95-108, 2006. [[pdf](#)]
62. Y. Deng, C. Palamidessi, J. Pang. Weak probabilistic anonymity. In *Proc. of SecCo'05, ENTCS 180*, Elsevier Science B.V., 55-76.2007. [[pdf](#)]
63. M. Bhargava, C. Palamidessi. Probabilistic anonymity. *Proc. of CONCUR'05, LNCS 3653*, ©Springer, 171-185, 2005. [[ps](#)]
64. K. Chatzikokolakis, C. Palamidessi. A Framework to Analyze Probabilistic Protocols and its Application to the Partial Secrets Exchange. *Proc. of TGC'05, LNCS 3705*, ©Springer, 146-162, 2005. [[pdf](#)]
65. Y. Deng, T. Chothia, C. Palamidessi, J. Pang. Metrics for Action-labelled Quantitative Transition Systems. *Proc. of QAPL'05*, volume 153 of *ENTCS*, pages 79-96. Elsevier B.V., 2006. [[pdf](#)]
66. Y. Deng, C. Palamidessi. Axiomatizations for probabilistic finite-state behaviors. *Proc. of FOSSACS 2005*, volume 3441 of *LNCS*, pages 110-124. ©Springer, 2005. [[pdf](#), [ps](#)] [Report version: [pdf](#), [ps](#)]
67. C. Palamidessi, O.M. Herescu. A Randomized Distributed Encoding of the  $\Pi$ -Calculus with Mixed Choice. *Proc. of IFIP-TCS 2002*, pages 537-549, Kluwer, 2002. [[ps](#), [ps of report version](#)]
68. M. Nielsen, C. Palamidessi, F.D. Valencia. On the expressive power of temporal concurrent constraint programming languages. *Proc. of PPDP'02*, pages 156-167, ACM, 2002. [[ps](#)]
69. C. Palamidessi. Mobile calculi for distributed programming. *Proc. of PPDP'02*, ACM, 2002. Invited Talk.
70. C. Palamidessi, F.D. Valencia. A Temporal Concurrent Constraint Programming Calculus. In T. Walsh, ed., *Proc. of CP 2001, LNCS 2239*, ©Springer-Verlag, 302-316, 2001. [[BibTeX entry](#), [ps](#)]
71. O.M. Herescu, C. Palamidessi. On the Generalized Dining Philosophers Problem. *Proc. of PODC'01*, pages 81-89, ACM, 2001. [[Abstract](#), [BibTeX entry](#), [ps](#)]
72. D. Gilbert, C. Palamidessi. Concurrent Constraint Programming with Process Mobility. In J. Lloyd et al., eds., *Proc. of CL 2000*, vol. 1861 of *LNAI*, pages 463-477. Springer-Verlag, 2000. ©Springer-Verlag. [[Abstract](#)[BibTeX entry](#), [ps](#)]
73. O.M. Herescu, C. Palamidessi. Probabilistic asynchronous  $\pi$ -calculus. In J. Tiuryn, ed., *Proc. of FOSSACS 2000 (Part of ETAPS 2000)*, vol. 1784 of *LNCS*, pages 146-160. Springer-Verlag, 2000. ©Springer-Verlag. [[Abstract](#), [ps](#), [BibTeX entry](#), [ps of report version](#)]

74. M. Bertolino, S. Etalle, C. Palamidessi. The Replacement Operation for CCP Programs. In A. Bossi, ed., *Proc. of LOPSTR'99*, vol. 1817 of *LNCS*, pages 216-233. Springer-Verlag, 2000. [[Abstract](#), [ps](#)]
75. C. Palamidessi. Expressiveness and Distributed Implementation of Concurrent Calculi with Link Mobility. In J.C.M. Baeten and S. Mauw, Eds., *Proc. of CONCUR'99*, vol. 1664 of *LNCS*, pages 28-29. Springer-Verlag, 1999. Invited talk.
76. M. Bertolino, S. Etalle, C. Palamidessi. Transformations of CCP Programs: preliminary results. In M.C. Meo and M. Vilares Ferro, eds., *Proc. of APPIA/GULP/PRODE'99*, pages 441-454. Gruppo Tipografico Editoriale, 1999.
77. E. Best, F.S. de Boer, C. Palamidessi. Partial Order and SOS Semantics for Linear Constraint Programs. *Proc. of Coordination 97*, vol. 1282 of *LNCS*, pages 256-273. Springer-Verlag, 1997. [[ps](#)]
78. C. Palamidessi. Constraint Programming for Concurrent and Distributed Computing. *Proc. of the JFPLC-UNIF '97*, Hermes Editions, pages 11-20, 1997. Invited talk.
79. C. Palamidessi. Comparing the expressive power of the Synchronous and the Asynchronous  $\pi$ -calculus. *Proc. of the 24th ACM Symposium on Principles of Programming Languages (POPL)*, pages 256-265, ACM, 1997. [[Abstract](#), [ps](#)]
80. F.S. de Boer, M. Gabbrielli, C. Palamidessi. Proving Correctness of Constraint Logic Programs with Dynamic Scheduling. In R. Cousot and D.A. Schmidt, eds., *Proc. of the Static Analysis Symposium (SAS 96)*, vol. 1145 of *LNCS*, pages 83-97. Springer-Verlag, 1996. [[ps](#)]
81. E. Best, C. Palamidessi. Linear Constraint Systems as High-level Nets. In U. Montanari and V. Sassone, eds., *Proc. of CONCUR 96*, vol. 1119 of *LNCS*, pages 498-513. Springer-Verlag, 1996. [[ps](#)]
82. R. McDowell, D. Miller, C. Palamidessi. Encoding Transition Systems in Sequent Calculus: Preliminary Report. *Proc. of the Linear Logic Workshop*, Tokyo, 29 March-2 April 1996. Vol. 3 of *ENTCS*. [[dvi](#), [ps](#)]
83. A. Cortesi, G. File', R. Giacobazzi, F. Ranzato, C. Palamidessi. Complementation in Abstract Interpretation. *Proc. of the Static Analysis Symposium (SAS)*. Vol. 983 of *Lecture Notes in Computer Science*, pages 100-117. Springer-Verlag, 1995. [A full version of this paper, with the same title, has appeared in *TOPLAS* 19(1)]
84. M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi. Confluence and Concurrent Constraint Programming. *Proc. of the Fourth International Conference on Algebraic Methodology and Software Technology (AMAST)*. Vol. 936 of *LNCS*, pages 531-545. Springer-Verlag, 1995. [A full version of this paper, with title [Confluence in Concurrent Constraint Programming](#), has appeared in *TCS* 183(2)]
85. K. Marriott, M. Falaschi, M. Gabbrielli, C. Palamidessi. A Simple Semantics for Logic Programming Languages with Dynamic Scheduling. *Proc. of the 18th Australian Computer Science Conference (ACSC)*, Adelaide, Australia, 1995. [A full version of this paper, with title [Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators](#), has appeared in *Information and Computation* 137(1)]
86. C. Palamidessi. Concurrent Constraint Programming. *Proc. of ALP-PLILP* Volumes 844 and 850 of *LNCS*, Springer-Verlag, 1994. Invited talk.
87. A. Di Pierro, C. Palamidessi. A Logical Denotational Semantics for Constraint Logic Programming. In D. Sannella, ed., *Proc. of Programming Languages and Systems (ESOP)*, Vol. 788 of *Lecture Notes in Computer Science*, pages 195-210. Springer-Verlag, 1994. [A full version of this paper, with title [An algebraic perspective of constraint logic programming](#), has appeared in the *Journal of Logic and Computation* 7(1)]
88. F.S. de Boer, M. Gabbrielli, E. Marchiori, C. Palamidessi. Proving Concurrent Constraint Programs Correct. *Proc. of the twentieth ACM Symposium on Principles of Programming Languages (POPL)*, pages 98-108, ACM, 1994. [[Abstract](#), [ps](#)]
89. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. Non-Monotonic Concurrent Constraint Programming. In D. Miller, ed., *Proc. of the International Logic Programming Symposium*, pages 315-334, The MIT press, 1993.
90. M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi. Compositional Analysis for Concurrent Constraint Programming. *Proc. of the Eight Annual IEEE Symposium on Logic in Computer Science, (LICS)*, pages 210-221. IEEE Computer Society Press, Los Alamitos, California, 1993. [[Abstract](#), [ps](#)]

91. F.S. de Boer, C. Palamidessi. A process algebra for concurrent constraint programming. In *Proc. of the International Symposium and Conference of Logic Programming*, pages 463-477, The MIT Press, 1992.
92. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. On Blocks: locality and asynchronous communication. *Proc. of REX workshop on Semantics - Foundations and Applications*. Vol. 666 of *Lecture Notes in Computer Science*, pages 73-90. Springer-Verlag, 1992.
93. K.R. Apt, E. Marchiori, C. Palamidessi. A Theory of First-Order Built-in's of Prolog. *Proc. of the Third Int. Conf. on Algebraic and Logic Programming (ALP)*. Vol. 632 of *Lecture Notes in Computer Science*, pages 69-83. Springer-Verlag, 1992. [The full version of this paper, with title [A Declarative Approach for First-Order Built-in's of Prolog](#), has appeared in *Applicable Algebra in Engineering, Communication and Computing*, 5(3/4)]
94. F.S. de Boer, C. Palamidessi. On the semantics of concurrent constraint programming. Invited paper in *Proc. of ALPUK 92, Workshops in Computing*, pages 145-173. Springer-Verlag, 1992.
95. F.S. de Boer, J.W. Klop, C. Palamidessi. Asynchronous communication in process algebra. In *Proc. of the seventh annual IEEE symposium on Logics in Computer Science (LICS)*, pages 137-147. IEEE Computer Society Press, Los Alamitos, California, 1992. [[Abstract](#), [ps](#)]
96. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. The failure of failures: Towards a paradigm for asynchronous communication. In J.C.M. Baeten and J.F. Groote, eds., *Proc. of CONCUR 91*, vol. 527 of *LNCS*, pages 111-126. Springer-Verlag, 1991. [The full version of this paper, with title [A paradigm for asynchronous communication and its application to concurrent constraint programming](#), has appeared in *Logic Programming Languages: Constraints, Functions, and Objects*]
97. F.S. de Boer, C. Palamidessi. Embedding as a tool for language comparison: On the CSP hierarchy. In J.C.M. Baeten and J.F. Groote, eds., *Proc. of CONCUR 91*, vol. 527 of *Lecture Notes in Computer Science*, pages 127-141. Springer-Verlag, 1991.
98. F.S. de Boer, C. Palamidessi. A Fully Abstract Model for Concurrent Constraint Programming. In S. Abramsky and T.S.E. Maibaum, eds., *Proc. of TAPSOFT/CAAP*, vol. 493 of *Lecture Notes in Computer Science*, pages 296-319. Springer-Verlag, 1991. [[Abstract](#), [ps](#)]
99. A. Di Pierro, M. Martelli, C. Palamidessi. Negation As Instantiation: a New Rule for the Treatment of Negation in Logic Programming. In K. Furukawa, ed., *Proc. of The Eight International Conference on Logic Programming*, pages 32-48, The MIT press, 1991. [A full version of this paper, with title [Negation as Instantiation](#), has appeared in *Information and Computation*, 120(2)]
100. S. Haridi, C. Palamidessi. Structural transformational semantics for Kernel Andorra Prolog. In E.H.L. Aarts, J. van Leeuwen, and M. Rem, eds., *Proc. of PARLE*, vol. 505, II of *LNCS*, pages 238-253. Springer-Verlag, 1991.
101. F.S. de Boer, C. Palamidessi. On the asynchronous nature of communication in concurrent logic languages: A fully abstract model based on sequences. In J.C.M. Baeten and J.W. Klop, eds., *Proc. of Concur 90*, vol. 458 of *LNCS*, pages 99-114, Amsterdam, 1990. Springer-Verlag.
102. F.S. de Boer, C. Palamidessi. Concurrent logic languages: Asynchronism and language comparison. In *Proc. of the North American Conference on Logic Programming*, pages 175-194. The MIT Press, Series in Logic Programming, 1990. [This work contains preliminary results which have been further developed in the papers [Embedding as a Tool for Language Comparison](#), and [A Fully Abstract Model for Concurrent Constraint Programming](#)]
103. G. Levi, M. Martelli, C. Palamidessi. Failure and success made symmetric. In *Proc. of the North American Conference on Logic Programming*, pages 3-22. The MIT Press, Series in Logic Programming, 1990. [[Report](#) version).
104. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. From failure to success: Comparing a denotational and a declarative semantics for Horn Clause Logic. In M.Z. Kwiatkowska, M.W. Shields, and R.M. Thomas, eds., *Proc. of the International Workshop on Semantics for Concurrency, Workshops in Computing*, pages 38-60, Leicester. Springer-Verlag, 1990.
105. C. Palamidessi. Algebraic properties of idempotent substitutions. In M.S. Paterson, ed., *Proc. of the 17th International Colloquium on Automata, Languages and Programming (ICALP)*, vol. 443 of *Lecture Notes in Computer Science*, pages 386-399, Warwick, England, 1990. Springer-Verlag. [[Report](#) version]



106. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. Semantic models for a version of PARLOG. In Giorgio Levi and Maurizio Martelli, eds., *Proc. of the Sixth International Conference on Logic Programming*, Series in Logic Programming, pages 621-636, Lisboa, 1989. The MIT Press.
107. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. Control flow versus logic: a denotational and a declarative model for Guarded Horn Clauses. In A. Kreczmar and G. Mirkowska, eds., *Proc. of the Symposium on Mathematical Foundations of Computer Science (MFCS)*, vol. 379 of *LNCS*, pages 165-176. Springer Verlag, 1989.
108. M. Falaschi, G. Levi, M. Martelli, C. Palamidessi. A new declarative semantics for logic languages. In R.A. Kowalski and K.A. Bowen, eds., *Proc. of the Fifth International Conference and Symposium on Logic Programming*, Series in Logic Programming, pages 993-1005, Seattle, USA, 1988. The MIT press, Cambridge, Mass. [The full version of this paper, with title [Declarative modeling of the operational behaviour of logic languages](#), has appeared in *Theoretical Computer Science*, 69(3)]
109. P. G. Bosco, E. Giovannetti, G. Levi, C. Moiso, C. Palamidessi. A complete semantic characterization of K-LEAF, a logic language with partial functions. In *Proc. of the Fourth IEEE Symposium on Logic Programming*, pages 318-327, San Francisco, 1987. IEEE Computer Society Press, N.W., Washington. [The full version of this paper, with title [Kernel LEAF: a logic plus functional language](#), has appeared in the *Journal of Computer and System Sciences*, 42(2)]
110. M. Bellia, P. G. Bosco, E. Giovannetti, G. Levi, and C. Moiso, C. Palamidessi. A two level approach to logic plus functional programming integration. In *Proc. of the Conference on Parallel Architectures and Languages Europe (PARLE)*, *LNCS*, pages 376-393, Eindhoven, The Netherlands, 1987. Springer Verlag.
111. G. Levi, C. Palamidessi. An approach to the declarative semantics of synchronization in logic languages. In J.-L. Lassez, ed., *Proc. of the Fourth International Conference on Logic Programming*, pages 877-893, Melbourne, 1987. The MIT Press.
112. G. Levi, C. Palamidessi. The declarative semantics of logical read-only variables. In *Proc. IEEE Symposium on Logic Programming*, pages 128-137, Boston, 1985. IEEE Computer Society Press.
113. M. Falaschi, G. Levi, C. Palamidessi. The formal semantics of processes and streams in logic programming. *Colloquia Mathematica Societatis Janos Bolyai*, 42:363-377, 1985.

### 3 Book Chapters

1. D. Chiarugi, M. Falaschi, C. Olarte, C. Palamidessi. A Declarative View of Signaling Pathways. In *Programming Languages with Applications to Biology and Security*, *LNCS* 9465, Springer, 183-201, 2015. [[http](#)]
2. E. Elsalamouny, K. Chatzikokolakis, and C. Palamidessi. Generalized differential privacy: regions of priors that admit robust optimal mechanisms. In F. van Breugel, E. Kashefi, C. Palamidessi, and J. Rutten, Jan, eds, *Horizons of the Mind. A Tribute to Prakash Panangaden*, *LNCS* 8464, Springer, 292-318, 2014. [[http](#)]
3. M.S. Alvim, M.E. Andrés, K. Chatzikokolakis, and C. Palamidessi. Quantitative Information Flow and Applications to Differential Privacy. In *FOSAD Tutorial Lectures*, *LNCS* 6858, Springer, 211-230, 2011. [[bib](#) , [DOI](#) , [http](#)]
4. G. Longo, C. Palamidessi, and T. Paul. Some Bridging Results and Challenges in Classical, Quantum and Computational Randomness. In H. Zenil, ed, *Randomness Through Computation*. World Scientific, 2011. ISBN: 978-981-4327-74-9. [[bib](#) , [http](#)]
5. R. Beauxis, C. Palamidessi, and F.D. Valencia. On the asynchronous nature of the asynchronous pi-calculus. In P. Degano, R. De Nicola, and J. Meseguer, eds, *Concurrency, Graphs and Models*, *LNCS* 5065, ©Springer, 473-492, 2008. [[pdf](#)]
6. Y. Deng, C. Palamidessi, J. Pang. Compositional reasoning for probabilistic finite-state behaviors. In A. Middeldorp, V. van Oostrom, F. van Raamsdonk, and R.C. de Vrijer, eds, *Processes, Terms and Cycles: Steps on the Road to Infinity*, *LNCS* 3838, ©Springer, 309-337, 2005. [[pdf](#)]
7. C. Palamidessi. Concurrent Logic Programming. Ch. 6 in M.I. Sessa, ed., *Ten years of Logic Programming in Italy*, Palladio, 167-210, 1995.

8. F.S. de Boer, C. Palamidessi. From Concurrent Logic Programming to Concurrent Constraint Programming. Chapter 2 in G. Levi, ed., *Advances in logic programming theory*, pages 55-113. Oxford University Press, 1994. [[Abstract](#), [ps](#)]
9. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. A paradigm for asynchronous communication and its application to concurrent constraint programming. Chapter 4 in K. Apt, J.W. de Bakker, and J.J.M.M. Rutten, eds., *Logic Programming Languages: Constraints, Functions, and Objects*, pages 82-114. Series in Logic Programming, The MIT Press, 1993. [[Abstract](#), [ps](#)]
10. F.S. de Boer, J.N. Kok, C. Palamidessi, J.J.M.M. Rutten. From failure to success: comparing a denotational and a declarative semantics for Horn clause logic. In J.W. de Bakker and J.J.M.M. Rutten, eds., *Ten years of concurrency semantics: selected papers of the Amsterdam Concurrency Group*. World Scientific Publisher, 1993.
11. P.G. Bosco, C. Cecchi, E. Giovannetti, C. Moiso, C. Palamidessi. Using Resolution for a Sound and Efficient Integration of Logic and Functional Programming Chapter 4 in J.W. de Bakker, ed., *Languages for Parallel Architectures. Design, Semantics, Implementation Models*, pages 167-221. Series in Parallel Computing, Wiley, Chichester, UK, 1989.

## 4 Divulgate Publications

1. K. Chatzikokolakis, C. Palamidessi, M. Stronati. Location privacy via geo-indistinguishability. *SIGLOG News* 2(3): 46-69, 2015. [[http](#)]
2. M. Gabbrielli, C. Palamidessi, and F.D. Valencia. Concurrent and reactive constraint programming. In Agostino Dovier and Enrico Pontelli, editors, *A 25-Year Perspective on Logic Programming*, pages 231-253. Springer, June 2010. [[bib](#) , [DOI](#) , [http](#)]
3. C. Palamidessi, F. Valencia. Languages for concurrency. *Bulletin of the EATCS, Column: Programming Languages*, 90:155-171, 2006. [[pdf](#)]
4. C. Palamidessi, F. Valencia. Recursion vs replication in process calculi: Expressiveness. *Bulletin of the EATCS, Column: Concurrency*, 87:105-125, 2005. [[pdf](#)]

## 5 Other Works

1. E. Best, F.S. de Boer, C. Palamidessi. Concurrent constraint programming with information removal. *Proc. of the First Workshop on Concurrent Constraint Programming*, pages 1-13, Venice, 1995.
2. C. Palamidessi, E. Pimentel. Embedding  $\pi$ -calculus in ccp. *Proc. of the First EXPRESS Workshop*, Amsterdam, 1994.
3. C. Palamidessi. A theory for modeling the synchronization mechanisms of concurrent logic languages. In A. Bossi, ed., *Proc. of the Conference Gruppo Utenti Logic Programming*, pages 331-346, Padova, Italy, 1990. Presented at the Workshop and Tutorial on Formal Models of Concurrent Computations, Telavi, Georgia, 2-6 October 1989.
4. C. Palamidessi. On the declarative semantics of Horn Clause Logic-based languages. *CWI-Quarterly*, 2(4), 1990.
5. G. Levi, M. Martelli, C. Palamidessi. A reconstruction of the declarative semantics of logic programs. Informal Preceedings of the *Workshop on Computer Science Logic*, Heidelberg, October 1989.
6. C. Palamidessi. Strutture ad Ordinamenti Parziali nella Semantica Dichiarativa dei Linguaggi Logici. PhD thesis, Technical Report of the Dipartimento di Informatica, Università di Pisa, 1988.
7. C. Palamidessi. A fixpoint semantics for Guarded Horn Clauses. Technical Report CS-R8833, Centre for Mathematics and Computer Science (CWI), Amsterdam, 1988.
8. C. Palamidessi, G. Levi. On the fixed point semantics of Horn clauses with infinite terms. Informal Proc. of the *Workshop on Logic Programming*, pages 474-484, Albufeira, Portugal, 1983.

## 6 Lecture Notes

1. C. Palamidessi. Syntax and Semantics of Programming Languages. Lecture Notes for the Course on Theory and Practice of Programming at the Department of Computer Science, University of Genova.
2. C. Palamidessi. Abstract data Types: From Specification to Implementation. Lecture Notes for the Course on Theory and Applications of Computing Machines at the Department of Computer Science, University of Pisa. *SEU (University Editorial Service)*, Pisa, 1990.
3. C. Palamidessi. Lectures on Mathematical Logics. Lecture notes for the course on Mathematical Logic, chaired by Professor G. Longo, at the Department of Computer Science, University of Pisa. *Editorial Service of the Opera Universitaria*, Pisa, 1985.