

PhD thesis and Habilitation

1. Thomas Jensen. *Abstract Interpretation in Logical Form*. PhD thesis, Imperial College, University of London, 1992.
2. Thomas Jensen, *Analyse statiques de programmes : fondements et applications*, document d'habilitation à diriger des recherches, Université de Rennes 1, 1999.

Editions

3. Isabelle Attali and Thomas Jensen (eds), *Proceedings of the International Workshop on Java Card (Java Card 2000)*, septembre 2000, Springer Lecture Notes in Computer Science vol. 2041.
4. Isabelle Attali and Thomas Jensen (eds), *Proceedings of the International Conference on Research in Smart Card Programming and Security (e-Smart 2001)*, septembre 2001, Springer Lecture Notes in Computer Science vol. 2140
5. Marieke Huisman and Thomas Jensen (eds.), *Journal of Logic and Algebraic Programming, special issue on Smart Cards*, volume 58(1-2), January-March 2004,
6. Michael Ernst and Thomas Jensen, (eds). *Proc. of 6th ACM SIGSOFT-SIGPLAN Workshop on Program Analysis for Software Tools and Engineering*. ACM, September 2005.
7. Ewen Denney and Thomas Jensen, (eds). *Proc of the 2009 Workshop on Proof Carrying Code and Software Certification*, August, NASA Publication Series, 2009
8. Sandrine Blazy and Thomas Jensen (eds). *Static Analysis: 22nd Int. Symposium (SAS 2015). Proceedings*, Springer LNCS vol. 9291, 2015.

Journals

9. Thomas Jensen. Conjunctive type systems and abstract interpretation of higher-order functional programs. *Journal of Logic and Computation*, 5(4):397–421 1995.
10. Thomas Jensen. Disjunctive Program Analysis for Algebraic Data Types. *ACM Transactions on Programming Languages and Systems*, 19(5):752–804, 1997.
11. Frédéric Besson, Thomas Jensen, Daniel Le Métayer, Tommy Thorn. Model checking security properties of control flow graphs. *Journal of Computer Security*, 9:217–250, 2001.
12. Ewen Denney, Thomas Jensen. Correctness of Java Card method lookup via logical relations, *Theoretical Computer Science* 283:305–331, 2002.
13. Anindya Banerjee, Thomas Jensen. Modular control-flow analysis with rank-2 intersection types, *Mathematical Structures in Computer Science*, 13(1):87–124, 2003.
14. Fausto Spoto, Thomas Jensen. Class Analyses via Abstract Interpretation of Trace Semantics, *ACM Transactions on Programming Languages and Systems*, 25(5):578–630, 2003.
15. Marc Eluard, Thomas Jensen. Validation du contrôle d'accès dans des cartes à puce multiapplications, *Technique et Science Informatiques*, 23(3): 323–358, 2004.
16. David Cachera, Thomas Jensen, David Pichardie, and Vlad Rusu. Extracting a data flow analyser in constructive logic. *Theoretical Computer Science*, 342(1):56–78, 2005.
17. Frédéric Besson, Thomas de Grenier de Latour, and Thomas Jensen. Interfaces for stack inspection. *Journal of Functional Programming*, 15(2):179–217, 2005.
18. Frédéric Besson, Thomas Jensen, and David Pichardie. Proof-Carrying Code from Certified Abstract Interpretation and Fixpoint Compression. *Theoretical Computer Science*, 364(3):273–291, 2006.

19. Frédéric Besson, Guillaume Dufay, Thomas Jensen, and David Pichardie. Verifying Resource Access Control on Mobile Interactive Devices *Journal of Computer Security*, 18(6):971-998, 2010.
20. David Cachera, Thomas Jensen, Arnaud Jobin, Pascal Sotin Long-run cost analysis by approximation of linear operators over dioids. *Mathematical Structures in Computer Science*, 20(4) :589-624, 2010.
21. Jan Midtgaard, Thomas Jensen. Control Flow Analysis of Function Calls and Returns by Abstract Interpretation. *Information and Computation* 211, pp. 49-76, 2012.
22. Thomas Jensen, Florent Kirchner, David Pichardie. Secure the Clones: Static Enforcement of Policies for Secure Object Copying. *Logical Methods in Computer Science* 8, 2. 2012.
23. David Cachera, Thomas Jensen, Arnaud Jobin, Florent Kirchner: Inference of polynomial invariants for imperative programs: A farewell to Gröbner bases. *Science of Computer Programming* 93, pp. 89-109, 2014.
24. Ahmad Salim Al-Sibahi, Alexandar Dimovski, Thomas Jensen, Andrzej Wasowski. Verification of High-Level Transformations with Inductive Refinement Types, *ACM Trans. on Software Engineering and Methodology*, 2020, (to appear).

Keynotes and Invited contributions

25. Thomas Jensen. Semantics-based security analysis, Invited talk, *17th International Conference on Mathematical Foundations of Programming Semantics (MFPS XVII)*, mai 2001.
26. Thomas Jensen. Types in program analysis, in: *The Essence of Computation: Complexity, Analysis, Transformation. Essays Dedicated to Neil D. Jones*, Springer LNCS vol. 2566 p. 204–222, 2002.
27. Thomas Jensen. Certificates for resource usage on mobile telephones, Invited talk, *2nd IEEE International Symposium on Leveraging Applications of Formal Methods, Verification and Validation (Isola 2006)*, November 2006.
28. Thomas Jensen. Certificates for resource usage on mobile telephones, Invited talk, *7th Int. Workshop on Issues in the Theory of Security (WITS'07)*, March 2007.
29. Thomas Jensen. Static Analysis for Extended Byte Code Verification, invitd talk, *2nd Int. Workshop on Proof-Carrying Code (PCC'08)*, June 2008.
30. Thomas Jensen. Formal methods for software security (invited talk), *Formal Methods Forum (FMF'17)*, January, 2017.
31. Thomas Jensen. Formal methods for software security (invited talk), *Inaugural meeting of GDR Sécurité Informatique*, June 2017.
32. Thomas Jensen. Hybrid information flow analysis against web tracking (invited talk), in *12th International Conference on Risks and Security of Internet and Systems (CRiSIS 2017)*, September 2017.
33. Ahmad Al-Sibahi and Thomas Jensen and Rasmus Mógelberg and Andrzej Wasowski. Galois Connections for Recursive Types. In *From Lambda Calculus to Cybersecurity through Program Analysis. Essays Dedicated to Chris Hankin on the Occasion of His Retirement*, Springer LNCS vol. 12065, pages 105–131, 2020.

Conferences and workshops with program committee

34. Thomas Jensen, Torben Æ. Mogensen. A Backwards Analysis for Compile Time Garbage Collection, *Proc. of European Symposium on Programming (ESOP'90)*, Springer LNCS 432, p. 227–239, 1990.
35. Samson Abramsky and Thomas Jensen. A relational approach to strictness analysis of higher order polymorphic functions. *Proc. 18th ACM Symposium on Principles of Programming Languages (POPL'91)*. ACM Press, 1991.

36. Thomas Jensen. Strictness analysis in logical form. *Proc. of 5th ACM Conference on Functional Programming Languages and Computer Architecture (FPCA'92)*, Springer LNCS vol. 523, 1991.
37. Eric Goubault and Thomas Jensen. Homology of higher dimensional automata. *Proc. of 3rd International Conference on Concurrency Theory (CONCUR)*, Springer LNCS vol. 630, 1992.
38. Thomas Jensen. Disjunctive strictness analysis. *Proc. of 7th IEEE Symposium on Logic In Computer Science (LICS'92)*. Computer Society Press of the IEEE, 1992.
39. Thomas Jensen. Axiomatising uniform properties of recursive data structures. *Proc. of 2nd Workshop on Static Analysis*, Bigre no. 81–82, 1992.
40. Lindsay Errington, Chris Hankin, and Thomas Jensen. A congruence for Gamma programs. *Proc. 3rd International Workshop on Static Analysis*, Springer LNCS vol. 724, 1993.
41. Thomas Jensen. Abstract interpretation over algebraic data types. *Proc. 5th IEEE International Conference on Computer Languages*. IEEE Press, May 1994.
42. Thomas Jensen. Clock analysis of synchronous dataflow programs. *Proc. of ACM Symposium on Partial Evaluation and Semantics-Based Program Manipulation (PEPM'95)*, ACM Press, San Diego, 1995.
43. Thomas Jensen, and Ian Mackie. Flow Analysis in the Geometry of Interaction. *Proc. of European Symposium on Programming (ESOP'96)*, Linköping. Springer LNCS, 1996.
44. Thomas Jensen, Inference of polymorphic and conditional strictness properties, *Proc. of 25th ACM Symposium on Principles of Programming Languages*, ACM Press, 1998
45. Thomas Jensen, Daniel Le Métayer, Tommy Thorn, Security and dynamic class loading in Java : a formalisation, *Proc. of 6th IEEE Int. Conference on Computer Languages*, IEEE Press, 1998.
46. Thomas Jensen, Daniel Le Métayer, Tommy Thorn, Verification of control flow based security properties, *Proc. of the 20th IEEE Symp. on Security and Privacy*, New York: IEEE Computer Society, p. 89–103, 1999.
47. Frédéric Besson, Thomas Jensen, Jean-Pierre Talpin, Polyhedral analysis for synchronous languages. *Proc. of 7th Int. Symp. on Static Analysis*. Springer LNCS vol. 1694, 1999.
48. Ewen Denney, Thomas Jensen, Correctness of Java Card method lookup via logical relations, *Proc. of European Symposium on Programming*, Springer LNCS vol. 1782, p. 104–118, 2000.
49. Thomas Jensen, Fausto Spoto, Class analysis of object-oriented programs through abstract interpretation, *Proc. of Foundations of Software Science and Computation Structures (FoSSaCS'01)*, Springer LNCS vol. 2030, p. 261–275, 2001.
50. Marc Éluard, Thomas Jensen, Ewen Denney, An Operational Semantics of the Java Card Firewall, *Proc. of Int. Conference on Research in Smart Card Programming and Security (e-Smart 2001)*, Springer LNCS, p. 95–110, 2001.
51. Igor Siveroni, Thomas Jensen, Marc Éluard, A Formal Specification of the Java Card Applet Firewall, *Proc. of Nordic Workshop on Secure IT-Systems*, 2001.
52. Thomas Jensen, Florimond Ployette, Olivier Ridoux: Iteration Schemes for fixed point computation, *Proc. of 4th Int workshop on Fixed Points in Computer Science (FICS'02)*, Copenhagen, 2002.
53. Frédéric Besson, Thomas de Grenier de Latour, Thomas Jensen: Secure calling contexts for stack inspection. *Proc. of 4th Int Conf. on Principles and Practice of Declarative Programming (PPDP 2002)*, p. 76–87, ACM Press, 2002.
54. Marc Éluard, Thomas Jensen: Secure object flow analysis for Java Card, *Proc. of 5th Smart Card Research and Advanced Application Conference (Cardis'02)*, p. 97–110, USENIX, 2002.

55. Lionel van Aertryck, Thomas Jensen, UML-CASTING: Test synthesis from UML models using constraint resolution, *Proc. Approches Formelles dans l'Assistance au Développement de Logiciels (AFADL'2003)*, INRIA, 15 pp. 2003.
56. Frédéric Besson, Thomas Jensen: Modular control flow analysis with Datalog, *Proc. of 10th Static Analysis Symposium (SAS 2003)*, Springer LNCS vol. 2694, pp. 19–36, 2003.
57. David Cachera, Thomas Jensen, David Pichardie, Vlad Rusu. Extracting a Data Flow Analyser in Constructive Logic, *Proc. of 13th European Symposium on Programming (ESOP'04)*, Springer LNCS vol. 2986, p. 385–400, 2004.
58. Gervan Le Guernic and Thomas Jensen. Monitoring information flow. In Andrei Sabelfeld, editor, *Proceedings of the 2005 Workshop on Foundations of Computer Security (FCS'05)*, pages 19–30. DePaul University, June 2005.
59. David Cachera, Thomas Jensen, David Pichardie, and Gerardo Schneider. Certified memory usage analysis. In *Proc. of 13th International Symposium on Formal Methods (FM'05)*, pages 91–106. Springer LNCS vol. 3582, 2005.
60. Frédéric Besson, Thomas Jensen, and David Pichardie. A PCC Architecture based on Certified Abstract Interpretation. In *Proc. of 1st International Workshop on Emerging Applications of Abstract Interpretation (EAAI'06)*, ENTCS. Springer-Verlag, 2006.
61. Frédéric Besson, Guillaume Dufay, and Thomas Jensen. A formal model of access control for mobile interactive devices. In *11th European Symposium On Research In Computer Security (ESORICS'06)*, Springer LNCS vol. 4189, 2006.
62. Pascal Sotin, David Cachera, and Thomas Jensen. Quantitative Static Analysis over semirings: analysing cache behaviour for Java Card. In *QAPL06, Quantitative Aspects of Programming Languages*, volume 1380 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 2006.
63. Gervan Le Guernic, Anindya Banerjee, Thomas Jensen, and David Schmidt. Automaton-based confidentiality monitoring. In *Proceedings of the 11th Annual Asian Computing Science Conference 2006*, pages 75–89. Springer LNCS vol. 4435, 2006.
64. Frédéric Besson, Thomas Jensen, Tiphaine Turpin. Small witnesses for abstract interpretation based proofs. In *Proceedings of the 16th European Symp. on Programming (ESOP 2007)*, Springer LNCS vol. 4421, 2007.
65. Yohann Boichut, Thomas Genet, Thomas Jensen, Luka Leroux. Rewriting Approximations for Fast Prototyping of Static Analyzers. In *Proc of Rewriting Techniques and Applications (RTA'07)*, Springer LNCS vol. 4533, pages 48–62, 2007.
66. Gilles Barthe, Pierre Cregut, Benjamin Gregoire, Thomas Jensen, David Pichardie. The Mobius Proof Carrying code infrastructure. In *Post-proc. of Formal Methods for Components and Objects (FMCO'07)*, Springer LNCS, 2008.
67. Laurent Hubert, Thomas Jensen, and David Pichardie. Semantic foundations and inference of non-null annotations. In *Formal Methods for Open Object-Based Distributed Systems (FMOODS'08)*, Springer LNCS vol. 5051, pages 132–149. 2008.
68. Frédéric Besson, Thomas Jensen, Tiphaine Turpin. Computing Stack Maps with Interfaces, In *Proc. of the 22nd European Conference on Object-Oriented Programming (ECOOP'08)*, Springer LNCS vol. 5142, pages 642–666, 2008.
69. Jan Midtgaard and Thomas Jensen. A Computational Approach to Control-Flow Analysis by Abstract Interpretation. In *15th International Static Analysis Symposium, (SAS 2008)*, Springer LNCS vol. 5079, pages 347–362, 2008.

70. David Cachera and Thomas Jensen and Arnaud Jobin and Pascal Sotin. Long-Run Cost Analysis by Approximation of Linear Operators over Dioids. In *Proc. of the 12th International Conference on Algebraic Methodology and Software Technology (AMAST'08)*, Springer LNCS vol. 5140, pages 122–138, 2008.
71. Benoit Boyer, Thomas Genet, Thomas Jensen. Certifying a Tree Automata Completion Checker. In *Proc. of Internatioanl Joint Conference on Automated Reasoning (IJCAR'08)*, Springer LNCS vol. 5195, 2008
72. Frédéric Besson and David Cachera and Thomas Jensen and David Pichardie. Certified Static Analysis by Abstract Interpretation. *Foundations of Security Analysis and Design (FOSAD 2009)*, Springer LNCS vol. 5705, 2009.
73. Jan Midtgaard and Thomas Jensen. Control-flow analysis of function calls and returns by abstract interpretation. *Proc. of the 14th ACM International Conference on Functional Programming*, pp. 287–298. ACM Press, 2009
74. Frédéric Besson, Thomas Jensen, David Pichardie, Tiphaine Turpin. Certified Result Checking for Polyhedral Analysis of Bytecode Programs. *Proc. of the 5th International Symposium on Trustworthy Global Computing (TGC 2010)*, Springer LNCS 6084, 2010.
75. Laurent Hubert, Thomas Jensen, Vincent Montfort, David.Pichardie. Enforcing secure object initialization in Java. *Proc. of 15th European Symp. on Research in Computer Security (ESORICS 2010)*, Springer LNCS vol. 6345, pages 101–115, 2010.
76. Delphine Demange, Thomas Jensen, David Pichardie. A Provably Correct Stackless Intermediate Representation for Java Bytecode. *Proc. of 8th Asian Symp. on Programming Languages and Systems (APLAS 2010)*, Springer LNCS vol. 6461, pages 97–113, 2010.
77. Laurent Hubert, Nicolas Barré, Frédéric Besson, Delphine. Demange, Thomas Jensen, Vincent Monfort, David Pichardie, Tiphaine Turpin. Sawja: Static Analysis Workshop for Java. *Proc. of 1st International Conference on Formal Verification of Object-Oriented Software (FoVeOOS)*, Springer LNCS vol. 6528, 2010.
78. Thomas Jensen, F. Kirchner, David Pichardie. Secure the Clones: Static Enforcement of Policies for Secure Object Copying. *Proc. of 20th European Symposium on Programming (ESOP 2011)*, Springer LNCS vol. 6602, p. 317-337, 2011.
79. David Cachera, Thomas Jensen, Arnaud Jobin, Florent Kirchner. Inference of polynomial invariants for imperative programs: a farewell to Gröbner bases. *Proc. of 19th Int. static Analysis Symposium (SAS 2012)*. Springer LNCS vol. 7460, pages 58–74. 2012
80. Frédéric Besson. Pierre Cornilleau, Thomas Jensen. Result Certification of Static Program Analysers with Automated Theorem Provers. In *Proc. of 5th Conf. on Verified Software: Theories, Tools and Experiments (VSTTE'13)*, pp. 304-325, 2013.
81. Frédéric Besson, Nataliia Bielova and Thomas Jensen. Hybrid Information Flow Monitoring Against Web Tracking. *Proc. of IEEE Conf. on Computer Security Foundations (CSF'13)*, pp. 240-254, 2013.
82. Frédéric Besson, Nataliia Bielova, Thomas Jensen. Browser Randomisation against Fingerprinting: A Quantitative Information Flow Approach. *Proc. of 19th Nordic Conf. on Secure IT Systems (NordSec 2014)* Springer LNCS vol. 8788, pp. 181-196. 2014.
83. Frédéric Besson, Thomas Jensen, Pierre Vittet: SawjaCard: A Static Analysis Tool for Certifying Java Card Applications, *Proc. of 21st Int. Static Analysis Symposium (SAS 2014)*, Springer LNCS vol. 8723 pp. 51-67, 2014.
84. José Santos, Thomas Jensen, Tamara Rezk, Alan Schmitt Hybrid Typing of Secure Information Flow in a JavaScript-Like Language. *Proc. of 10th Trustworthy Global Computing (TGC'15)*, Springer LNCS vol. 9533, pp. 63-78, 2015.

85. Oana Andreescu, Thomas Jensen, Stéphane Lescuyer: Dependency Analysis of Functional Specifications with Algebraic Data Structures. *Proc. 17th Int. Conf on Formal Engineering Methods (ICFEM 2015)*, Springer LNCS vol. 9407, pp. 116-133, 2015
86. Martin Bodin, Thomas Jensen, Alan Schmitt: Certified Abstract Interpretation with Pretty-Big-Step Semantics. *Proc. of ACM Conf. on Certified Programs and Proofs (CPP'15)*, pp. 29-40, ACM Press, 2015.
87. Frédéric Besson, Nataliia Bielova and Thomas Jensen: Hybrid Monitoring of Attacker Knowledge. *Proc. of IEEE Conf. on Computer Security Foundations (CSF'16)*, pp. 225-238 2016.
88. Oana Andreescu, Thomas Jensen, Stéphane Lescuyer: Correlating Structured Inputs and Outputs in Functional Specifications. *Proc. of 14th Int Conf. on Software Engineering and Formal Methods (SEFM 2016)*. Springer LNCS vol. 9763, pp. 85-103, 2016
89. Pauline Bolognani, Thomas Jensen, Vincent Siles: Modeling and abstraction of memory management in a hypervisor. *Proc. of Fundamental Approaches to Software Engineering (FASE'16)*. Springer LNCS vol. 9633, pp. 214-230, 2016
90. Thomas Genet, Timothée Haudebourg, Thomas P. Jensen Verifying Higher-Order Functions with Tree Automata. *Proc. of 21st Int. Conf. on Foundations of Software Science and Computation Structures (FoSSaCS 2018)*, Springer LNCS vol. 10803, pages 565-582, 2018.
91. Frédéric Besson, Thomas Jensen, Julien Lepiller. Modular Software Fault Isolation as Abstract Interpretation. *Proc. of 25th Static Analysis Symposium (SAS 2018)*, Springer LNCS vol. 11002, pages 166-186, 2018
92. Ahmad Salim Al-Sibahi, Alexandar Dimovski, Thomas Jensen, Andrzej Wasowski, Verification of High-Level Transformations with Inductive Refinement Types, *17th ACM Int. Conference on Generative Programming: Concepts & Experience GPCE 2018*, pages 1-14, 2018. Best paper award.
93. Frédéric Besson and Alexandre Dang and Thomas P. Jensen Securing Compilation Against Memory Probing *Proc. 13th Workshop on Programming Languages and Analysis for Security, PLAS@CCS 2018*, pages 29–40, ACM, 2018.
94. Martin Bodin, Philippa Gardner, Thomas Jensen, Alan Schmitt. Skeletal semantics and their interpretations. *Proc. ACM Program. Lang.* 3(*POPL*):44:1–44:31, 2019.
95. Oana Andreescu, Thomas Jensen, Stéphane Lescuyer, Benoît Montagu. Inferring frame conditions with static correlation analysis. *Proc. ACM Program. Lang.* 3(*POPL*):47:1–47:29, 2019.
96. Frédéric Besson, Alexandre Dang, Thomas Jensen, Information-Flow Preservation in Compiler Optimisations. *Proc. of 32nd IEEE Computer Security Foundations Symp. (CSF'19)*, IEEE, 2019.
97. Frédéric Besson, Sandrine Blazy, Alexandre Dang, Thomas Jensen, Pierre Wilke. Compiling Sandboxes: Formally Verified Software Fault Isolation. *Proc. of 28. European Symp. on Programming (ESOP 2019)*, Springer LNCS vol. 11423, pp. 499-524, 2019.
98. Benoît Montagu, Thomas Jensen. Stable Relations and Abstract Interpretation of Higher-Order Programs. *Proc. ACM Program. Lang.* 4(*ICFP*):119, 30 pages, 2020.
99. Timothée Haudebourg, Thomas Genet, Thomas Jensen. Regular Language Type Inference with Term Rewriting. *Proc. ACM Program. Lang.* 4(*ICFP*):112, 29 pages, 2020

Patents

100. Patent No. 99 08460 “Procédé de vérification de transformateurs de codes pour un système embarqué, notamment sur une carte à puce”, l’Institut National de Propriété Industrielle le 1 juillet 1999. Transferred to Bull CP 8 the 15 octobre 2004.
101. Patent No WO/2007/135316 “ Determination of numbers of critical path methods calls in an object language application”, with France Télécom, 2007.

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