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Publication List

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Refereed Journals

- Aubert, C.** (2023b). “The Correctness of Concurrency in (Reversible) Concurrent Calculi”. In: *Journal of Logical and Algebraic Methods in Programming*, p. 100924. ISSN: 2352-2208. DOI: 10.1016/j.jlamp.2023.100924. hal: hal-03950347.
- Aubert, C.** and Daniele Varacca (2022). “Processes Against Tests: On Defining Contextual Equivalences”. In: *Journal of Logical and Algebraic Methods in Programming*, p. 100799. ISSN: 2352-2208. DOI: 10.1016/j.jlamp.2022.100799. hal: hal-03535565.
- Aubert, C.** and Marc Bagnol (2018). “Unification and Logarithmic Space”. In: *Logical Methods in Computer Science* 14.3. DOI: 10.23638/LMCS-14(3:6)2018.
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- Aubert, C.** and Thomas Seiller (2016a). “Characterizing co-NL by a group action”. In: *Mathematical Structures in Computer Science* 26 (04), pp. 606–638. ISSN: 1469-8072. DOI: 10.1017/S0960129514000267.
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Selective Conferences

- Aubert, C.** (2023a). “Replications in Reversible Concurrent Calculi”. In: *Reversible Computation (RC 2023)*. Vol. 13960. LNCS. Springer. ISBN: 978-3-031-38099-0. DOI: 10.1007/978-3-031-38100-3_2. hal: hal-04174437.
- Aubert, C.**, Thomas Rubiano, Neea Rusch, and Thomas Seiller (2023b). “Distributing and Parallelizing Non-canonical Loops”. In: *Verification, Model Checking, and Abstract Interpretation (VMCAI 2023)*. Vol. 13881. LNCS. Springer, pp. 1–24. DOI: 10.1007/978-3-031-24950-1_1. hal: hal-03669387.
- Aubert, C.**, Thomas Rubiano, Neea Rusch, and Thomas Seiller (2023c). “pymwp: A Static Analyzer Determining Polynomial Growth Bounds”. In: *Automated Technology for Verification and Analysis*. Ed. by Étienne André and Jun Sun. Cham: Springer Nature Switzerland, pp. 263–275. ISBN: 978-3-031-45332-8. DOI: 10.1007/978-3-031-45332-8_14.
- Aubert, C.** and Peter Browning (2023b). “Implementation of a Reversible Distributed Calculus”. In: *Reversible Computation (RC 2023)*. Vol. 13960. LNCS. Springer, pp. 210–217. ISBN: 978-3-031-38099-0. DOI: 10.1007/978-3-031-38100-3_13. hal: hal-04174439.
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- Aubert, C.**, E Andrew Balas, Tiffany Townsend, Noah Sleeper, and CJ Tran (2022). “Data Integration for the Study of Outstanding Productivity in Biomedical Research”. In: *International Conference on Current Research Information Systems (CRIS 2022)*. Vol. 211. Procedia Computer Science. Elsevier, pp. 196–200. DOI: 10.1016/j.procs.2022.10.191.
- Aubert, C.**, Ross Horne, and Christian Johansen (2022b). “Diamonds for Security: A Non-Interleaving Operational Semantics for the Applied Pi-Calculus”. In: *Concurrency Theory (CONCUR 2022)*. Vol. 243. LIPIcs. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 30:1–30:26. DOI: 10.4230/LIPIcs.CONCUR.2022.30.
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- Aubert, C.** and Doriana Medić (2021). “Explicit Identifiers and Contexts in Reversible Concurrent Calculus”. In: *Reversible Computation (RC 2021)*. Vol. 12805. LNCS. Springer, pp. 144–162. ISBN: 978-3-030-79836-9. DOI: 10.1007/978-3-030-79837-6_9.
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Editorship

- Aubert, C.**, Cinzia Di Giusto, Simon Fowler, and Larisa Safina, eds. (2023). *Proceedings 16th Interaction and Concurrency Experience*. Vol. 380. Open Publishing Association. DOI: 10.4204/EPTCS.380. URL: <https://cgi.cse.unsw.edu.au/~eptcs/content.cgi?ICE2023>.
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Workshops With Published Proceedings

- Aubert, C.**, Ross Horne, and Christian Johansen (2022a). “Bisimulations Respecting Duration and Causality for the Non-interleaving Applied π -Calculus”. In: *Expressiveness in Concurrency and Structural Operational Semantics (EXPRESS / SOS 2022)*. Vol. 368. EPTCS. Open Publishing Association, pp. 3–22. DOI: 10.4204/EPTCS.368.1.
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Workshops Without Published Proceedings

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- Aubert, C.** (2015). *An in-between “implicit” and “explicit” complexity: Automata*. Communication at DICE 2015. hal: /hal-01111737.

Software

- Aubert, C.**, Thomas Rubiano, *Neea Rusch*, and Thomas Seiller (2023d). *pymwp: MWP analysis in Python*. Version 0.4.2. URL: <https://github.com/statycc/pymwp/>.
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- Aubert, C.**, Thomas Rubiano, *Neea Rusch*, and Thomas Seiller (2022a). *Loop Fission Benchmarks*. Version 1.1. DOI: 10.5281/zenodo.7080144. URL: <https://github.com/statycc/loop-fission>.

- Sleeper, Noah* and **C. Aubert** (2022). *Data Integration for the Study of Outstanding Productivity in Biomedical Research*. Version 1.0.0. URL: <https://github.com/popbr/data-integration>.
- Aubert, C.**, Thomas Rubiano, *Neea Rusch*, and Thomas Seiller (2021). *LQICM On C Toy Parser*. Version 3.0.0. URL: https://github.com/statycc/LQICM_On_C_Toy_Parser.

Theses

- Aubert, C.** (2013). “Linear Logic and Sub-polynomial Classes of Complexity”. PhD thesis. Université Paris 13–Sorbonne Paris Cité. 182 pp. hal: /te1-00957653. Supervisors: Stefano Guerrini, Virgile Mogbil (UMR CNRS 7030 — Paris 13).
- Aubert, C.** (2010). “Réseaux de preuves booléens sous-logarithmiques”. MA thesis. LIPN: LMFI, Paris VII. 29 pp. Supervisors: Virgile Mogbil, Paulin Jacobé de Naurois (UMR CNRS 7030 — Paris 13).
- Aubert, C.** (2009). “L’élimination des coupures dans la Logique des Domaines Constants”. MA thesis. Paris 1. 29 pp. Supervisor: Jean-Baptiste Joinet (UMR CNRS 7126 — Paris 7).

Research Report

- Aubert, C.** (2020). *Quelle est la notion correcte de congruence structurelle pour une algèbre de processus?* Research Report. hal: /hal-02981196.
- Aubert, C.** (2019). *Categories for Me, and You?* Research Report. hal: /hal-02308858.
- Aubert, C.**, Marc Bagnol, and Thomas Seiller (2015). *Memoization for Unary Logic Programming: Characterizing Ptime*. Research Report RR-8796. INRIA. 28 pp. arXiv: 1501.05104 [cs.LG].