

Olivier Stietel

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Publications

- 2023 **On the Satisfiability of Local First-Order Logics with Data**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Preprint submitted to LMCS.
- 2022 **On the Existential Fragments of Local First-Order Logics with Data**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Submitted to GandALF. Invited for publication in LMCS special issue.
- 2021 **Local First-Order Logic with Two Data Values**, with Benedikt Bollig and Arnaud Sangnier ([url](#)).
Submitted to FSTTSC.

Presentations

- Sep. 2022 **GandALF**.
- Dec. 2021 **FSTTCS**.
- June 2020 **MOVEP**.

Education

- 2019–2023 **Ph.D. graduate**, *IRIF (Université de Paris) and LSV (now LMF) (ENS Paris-Saclay)*, Paris, France. Defended on 14th December 2023.
Title: “Local First Order Logic with Data: Toward Specification of Distributed Algorithms”.
Supervisors: Arnaud Sangnier and Benedikt Bollig
- 2018–2019 **M2 MPRI (Master Parisien en Recherche Informatique)**, *University Paris-Diderot*, Paris, France.
Subjects : Well Quasi Order, Graph theory, Approximation Algorithms, Algorithms and Combinatorics for Geometric Graphs, Polytopes, B-automaton and regular cost function.
- 2017–2018 **MPRI (Master Parisien en Recherche Informatique)**, *University Paris-Diderot*, Paris, France.
Subjects : Linear Logic, Category Theory, Semantics, Proof assistant, functional programming and type systems.
- 2015–2016 **Agrégation de mathématiques**, *ENS Cachan*, Cachan, France, ranked 67th out of ~300.
National high-level competitive exam for teaching. Major in Maths, minor in Computer Science.

- 2015 **Succeeded the competitive entrance exam**, *ENS Cachan*, Cachan, France.
- 2014–2015 **Master 1 in mathematics**, *Université Paris IX*, Orsay, France, with honors.
Subjects : Computer Algebra, Algebra (Galois's Theory), Probability (Markov's chains, Martingales), Logic (Set Theory and Gödel's Theorems), Algorithms for Graph, Algebraic Topology.
- 2013–2014 **Bachelor's degree in mathematics**, *Université Paris IX*, Orsay, France, with honors.
Subjects : Algorithmics, Graph theory, Probability, Calculus, ODE, Differential Geometry, Algebra, Combinatorics, Fourier Analysis, Complex Analysis.
- 2011–2013 **Classes préparatoires MPSI-MP**, *Lakanal High School*, Sceaux, France.
Two-years french intensive undergraduate studies with majors in mathematics and physics, and minors in chemistry, engineering, french and english.
- 2011 **Baccalauréat série Scientifique**, *Villaroy High School*, Guyancourt, France.
Equivalent of A-levels with majors in mathematics, physics and biology, and with several other classes.

Research Internships

- Apr-Aug 2019 **Master Internship**, *Institut de Recherche en Informatique Fondamentale (IRIF)*, Paris, France.
Regular cost function: universal algebras, categories and non-standard analysis.
Supervisors: Thomas Colcombet and Daniela Petrisan.
- Jan-Mar 2019 **Research Internship**, *Department of Computer Science*, Oxford, England.
Studies of exchangeable sequences of random variable and generalization of the DeFinetti's theorem.
Supervisor: Sam Staton.
- Oct-Dec 2018 **Research Internship**, *Department of Computer Science of ENS Ulm*, Paris, France.
Studies of probabilistic approximation algorithms on the problem of stable marriage.
Supervisor: Chien Chung Huang.
- Apr-Aug 2018 **Research Internship**, *Institut de Recherche en Informatique Fondamentale (IRIF)*, Paris.
Semantics of probabilistic PCF, probabilistic coherence spaces and KegelSpitzen.
Supervisors : Michele Pagani and Thomas Ehrhard.
- August 2017 **Research Internship**, *Laboratoire Spécification et Vérification (LSV)*, Cachan, France.
Contributed to the proof assistant Dedukti.
Supervisor: Gilles Dowek.
- July 2015 **Research Internship**, *Laboratoire de Recherche en Informatique (LRI)*, Orsay, France.
Proving a theorem of combinatorics in COQ and learning proof assistant software theory.
Supervisors: Christine Paulin and Florent Hivert.
- 2015 **Master's project**, *Université Paris IX*, Orsay, France, with honors.
Title : Connection of singularity on the torus. A problem of geometry, measure theory and arithmetics.
Supervisor: Frédéric Paulin.
- 2014 **Bachelor's project**, *Université Paris IX*, Orsay, France., with honors.
Hairy ball's theorem, a problem of differential geometry.
Supervisor: Anne Vaugon.

Teaching Experiences

- 2022-2023 **Teaching assistant**, *Université Paris Cité*, Paris, France, (192 hours).
- Introduction to Operating Systems (1st year of Bachelor),
 - Project Management (2nd year of Bachelor),
 - Logical Tools: Propositional Calculus (2nd year of Bachelor).
- 2021-2022 **Teaching assistant**, *Université Paris Cité*, Paris, France, (64 hours).
- Principles of Computing Systems (2nd year of Bachelor),
 - Introduction to Programming in Python (1st year of Bachelor).
- 2020-2021 **Teaching assistant**, *Université de Paris*, Paris, France, (64 hours).
- Principles of Computing Systems (2nd year of Bachelor),
 - Introduction to Programming in C (2nd year of Bachelor).
- 2019–2020 **Teaching assistant**, *Université Paris-Diderot*, Paris, France, (64 hours).
- Introduction to HTML, CSS, Javascript and SQL (1st year of Bachelor),
 - Project Management (2nd year of Bachelor).
- 2016 **Teaching assistant**, *MEC (Engineering school)*, Hyderabad, India, (64 hours).
- Introduction to Programming in Python (1st year of Bachelor),
 - Probability and Statistics (3rd year of Bachelor).
- 2015–2016 **Oral Examiner**, *Classes préparatoires at Lakanal High School*, Sceaux, France, (48 hours).
- General Mathematics (2nd year of Bachelor).

Computer Skills

- OS GNU/Linux
- Writing Latex, TikZ, Ipe
- Programming Python, Sage, C, Ocaml, Java

Languages

- French Native language.
- English Proficient speaking and writing skills.
- German Equivalent to A2 level, still in the process of learning.

Hobbys

- Music Sing in choir and play viola in orchestra.
- Sports Swimming, running, ultimate frisbee, spike ball.