



Victor Arrial

Curriculum Vitae

Education

- 2021 – Today **Thèse de Doctorat**, *Université Paris Cité, CNRS, IRIF* – (Ongoing).
- 2020 – 2021 **Master Parisien de Recherche en Informatique (M2)**, *Université Paris Cité*.
Ranking: 32/65 (with high honors)
- 2019 – 2020 **Master Parisien de Recherche en Informatique (M1)**, *Université Paris Cité*.
Ranking: 6/117 (with highest honors)
- 2018 – 2019 **Cycle Pluridisciplinaire d'Études Supérieures (L3)**, *Paris Sciences et Lettres*.
Domain: Sciences – Specialty: Mathématique - Informatique
- 2018 – 2019 **Mathématiques et Informatique de la Décision et des Organisation (L3)**,
Université Paris Dauphine.
- 2017 – 2018 **Cycle Pluridisciplinaire d'Études Supérieures (L2)**, *Paris Sciences et Lettres*.
Domain: Sciences – Specialty: Mathématiques - Physique (with honors)
- 2016 – 2017 **Cycle Pluridisciplinaire d'Études Supérieures (L1)**, *Paris Sciences et Lettres*.
Domain: Sciences – Specialty: Sciences Expérimentales (with honors)
- 2013 – 2016 **Lycée Général**, *Lycée Marie-Joseph, Trouville-sur-Mer*.
Specialty: SVT – Option: Mathématiques (with highest honors)

Publications

Journals

- [J1] V.Arrial, G.Guerrieri, D.Kesner, *Quantitative Inhabitation for Different Lambda Calculi in a Unifying Framework*, PACMPL Vol. 7, Symposium on Principles of Programming Languages (POPL), 2023.

Conferences

- [C3] V.Arrial, G.Guerrieri, D.Kesner, *Genericity Through Stratification*, ACM/IEEE, Symposium on Logic in Computer Science (LICS), 2024 (*Accepted paper, to appear*).
- [C2] D.Kesner, V.Arrial, G.Guerrieri, *Subsuming CBN and CBV Meaningfulness in Bang*, LIPLcs, International Conference on Formal Structures for Computation and Deduction (FSCD), 2024 (*Invited paper, to appear*).

- [C1] V.Arrial, G.Guerrieri, D.Kesner, *The Benefits of Diligence*, LNAI, International Joint Conference on Automated Reasoning (IJCAR), 2024 (Accepted paper, to appear).

Workshops

- [W7] V.Arrial, *Call-by-Value Typing Revisited, for Free ?*, 11th Workshop on Intersection Types and Related Systems (ITRS), 2024. (Upcoming)
- [W6] V.Arrial, *The Benefits of Diligence*, Structures formelles pour le CALCul et les Preuves (SCALP), 2023.
- [W5] V.Arrial, *A Deeper Study of $\lambda^!$ -Calculus Simulations*, International Workshop on Higher-Order Rewriting (HOR), 2023.
- [W4] V.Arrial, *Quantitative Inhabitation in Call-by-Value*, 28th International Conference on Types for Proofs and Programs (TYPES), 2022.
- [W3] V.Arrial, G.Guerrieri, D.Kesner *Quantitative Inhabitation in Call-by-Push-Value*, New Ideas in Effects, Types, and Sharing (NIETS), 2022.
- [W2] V.Arrial, G.Guerrieri, D.Kesner *Quantitative Inhabitation through Call-by-Push-Value*, French-Argentinian Workshop on Logics and Dynamics of Programming Languages (SINFIN), 2022.
- [W1] V.Arrial, G.Guerrieri, D.Kesner *Inhabitation in Call-by-Push-Value*, Structures formelles pour le CALCul et les Preuves (SCALP), 2021.

Invited Seminars

- [S8] V.Arrial, *Genericity Through Stratification*, PPS Days, IRIF, Université Paris Cité, 2024. (Upcoming)
- [S7] V.Arrial, *The Benefits of Diligence*, Syntax Meets Semantics, IRIF, Université Paris Cité, 2024. (Upcoming)
- [S6] V.Arrial, *The Bang-Calculus: An Accessible Introduction to Subsuming Paradigms*, Non-Permanent Seminar, IRIF, Université Paris Cité, 2024.
- [S5] V.Arrial, *Genericity Through Stratification*, Chocla, ENS Lyon, 2024.
- [S4] V.Arrial, *Exploring the Bang-Calculus and Its Embeddings*, Séminaire LoVe, LIPN, Université Paris Nord, 2024.
- [S3] V.Arrial, D.Kesner, *Quantitative Inhabitation*, Workshop in Honour of Antonio Bucciarelli's 60th Birthday, IRIF, Université Paris Cité, 2023.
- [S2] V.Arrial, *The Bang-Calculus, Inhabitation and Approximants*, Séminaire Logique et Interactions, I2M, Université Aix-Marseille, 2023.
- [S1] V.Arrial, *Introduction to Lambda-Calculus and Quantitative Typing Systems*, Non-Permanent Seminar, IRIF, Université Paris Cité, 2023.

International schools

- [E2] *Differential λ -Calculus and Differential Linear Logic, 20 Years Later (DiLL)*, to be held at CIRM, Marseille, 2024.
- [E1] *Quantitative Aspects of Program Semantics, Verification and Transformation*, Foundations of Programming and Software Systems (FoPSS), Bertinoro, 2023.

Teaching

- 2023 – 2024 **Université Paris Cité.**
- M2 LMFI: *Proofs and Programs* (2h CM - *Guest Lecturer*)
 - IP1: *Introduction à la Programmation Java* (12h CM/TD + 12h TP)
 - Poo-IG: *Programmation Orientée Objet - Interface Graphique* (24h TP + *Projet*)
 - CProj: *Conduite de Projet* (12h TP)
- 2022 – 2023 **Université Paris Cité.**
- IP1: *Introduction à la Programmation Java* (12h CM/TD + 12h TP)
 - PF1: *Principe de Fonctionnement des Machines Binaires* (24h TD + 12h TP)
- 2021 – 2022 **Université Paris Cité.**
- IP2: *Initiation à la Programmation Java* (24h TD + 12h TP)
 - CI2: *Concepts Informatiques* (24h TD)

Thesis and Internships

- 2021 *Inhabitation in Call-by-Push-Value*, IRIF, Paris.
Direction: D.Kesner & G.Guerrieri - *Duration:* 6 months
- 2020 *Inhabitation in the $\lambda\mu$ -Calculus*, IRIF, Paris.
Direction: D.Kesner - *Duration:* 2 months
- 2019 *Curry-Howard Correspondence and Linear Logic*, IRIF, Paris.
Supervision: J.Chouquet & L.Stéfanescu - *Duration:* 5h per week over 6 months
- 2018 *Regression and Classification Problems for Machine Learning*, SAMM, Paris.
Supervision: P.Latouche - *Duration:* 2.5h per week over 6 months
- 2016 *Discovery Internship (Research Lab)*, CEA Tech, Saclay.
Supervision: C.Hudin - *Duration:* 1 week
- 2015 *Discovery Internship (R&D Lab)*, Protéor handicap, Beaune.
Supervision: J.Mille - *Duration:* 1 week

Others

Languages French (mother tongue), English (fluent), Spanish (B2), Italian (starting in June)

Programming OCaml, Java, Python, $\text{\LaTeX}$, Coq, ...