

# Curriculum vitae

Name: **TASSON, Christine**

Date of birth: May, 27th 1981

Mail: Christine.Tasson@isae-superaero.fr

Status: female, French, married, two children

Website:<https://pagespro.isae-superaero.fr/christine-tasson/>

ORCID:1-8098-9944

## Research topics

During my career, I have focused my research on programming languages and mathematical models. I have done a PhD in semantics of programming languages using topological vector spaces. I have then turned to combinatorial semantics of distributed systems. I am now focusing my research on the semantics of probabilistic programming and reactive or synchronous programming.

## Education

- 2018 Habilitation à diriger des recherches at Université Paris VII, France  
Date defended: November, 23th 2018  
Title: [Models of Distributed, Differential and Probabilistic Computation](#)
- 2006-2009 PhD in Computer Science at Université Paris VII, France  
Date defended: December, 4th 2009  
Title: [Vectorial Semantics and Syntax in Linear Logic](#)  
Advisors: Pierre-Louis Curien and Thomas Ehrhard
- 2006 Parisian Master of Research in Computer Science
- 2005 "Agrégation" in Mathematics, French National Teaching diploma
- 2002-2006 Schooling at the École Normale Supérieure (ENS) de Cachan (Now Paris-Saclay)

## Employment

- 2023-NOW Professor at ISAE Superaero, France
- 2020-2022 Full professor (Professeure) at Sorbonne Université, France
- 2010-2020 Assistant professor (Maîtresse de conférences) at Université de Paris, France  
Affiliated to the "Institut de Recherche en Informatique Fondamentale" (IRIF)
- 2009-2010 Post-doc researcher in Éric Goubault's team at CEA, France  
ATER in Mathematics department at Université Paris VII

## Awards

- 2021 IUF junior member
- 2020  $S^3$ , JCJC ANR Project funded by the french National Agency for Research by a young searcher.
- 2020 Realise, Emergence Mairie de Paris Project funded by Paris City for a young searcher.
- 2015 [Shortlisted](#) (2 nominees) for "médaillles de Bronze" of the French National Scientific Research Center (CNRS), Computer Science ([section 6](#)). *It awards each year one promising french young researchers among all the researchers of INRIA, CNRS and assistant professors in the area corresponding to each section.*
- 2015 International Conference on Automated Deduction (CADE) [Skolem Award](#) for a CADE paper (over 25 papers) that has Passed the Test of Time, by being a Most Influential Paper in the field.

## Plenary invited speaker

- 2024 Tutorial with G. Baudart at [EJCIM](#) (École des jeunes chercheurs et chercheuses en informatique fondamentale et mathématiques, France)
- 2024 [DILL](#), (Differential  $\lambda$ -calculus and Differential Linear Logic, 20 years later, CIRM, France)
- 2024 [Chocola](#), Lyon, France
- 2024 Tutorial at [JFLA](#) (Journées Francophones des Langages Applicatifs, France)
- 2023 Tutorial at [FOPPS](#) (Quantitative Aspects of Program Semantics, Verification and Transformation, Bertinoro, Italy)
- 2022 [Workshop in Honour of Thomas Ehrhard's 60th Birthday](#) (Paris, France)
- 2022 [Collège de France](#) (Workshop on Probabilistic Programming associated to the "science du logiciel" chair, Paris, France)
- 2022 Keynote at [JNIM](#) (Journées nationales du GDR-IM, Lille, France)
- 2021 [SYCO7](#) (International Symposium on Compositional Structure, Tallinn, Estonia)
- 2021 Tutorial at [CIE](#) (Computability in Europe)
- 2020 [MFPS](#) (International conference on Mathematical Foundations of Programming Semantics, Paris, France)
- 2020 [The Gandy Colloquium](#) (International workshop for the centenary of Robin Gandy, Oxford, France)
- 2019 [Program Transformations for Machine Learning](#) (International workshop at Neurips 19, Vancouver, Canada)
- 2019 [Collège de France](#) (National seminar associated to the "science du logiciel" chair, Paris, France)
- 2018 [CSL](#) (International conference on Computer Science and Logic, Birmingham, UK)
- 2017 [FSCD](#) (International conference on Formal Structures for Computation and Deduction, Oxford, UK)

## Workshop invitations

- 2020, 2022 Workshop on Probabilistic Programming, Mc Gill University, Canada (Cancelled)
- 2019 [Workshop on Higher-order probabilistic computation](#), Mc Gill University, Canada
- 2016 [Compositionality](#), International workshop, Simons Institute, Berkeley, USA
- 2013 [Workshop on Information and Processes](#), Tulane University, USA

## Carreer Breaks

- From 13/09/2014 to 02/01/2015 Second child maternity break
- From 23/05/2011 to 11/09/2011 First child maternity break

## Supervision

2024	<b>Simon Forest</b> , Postdoc on coherence in bicategorical semantics
2024	<b>Tudual Durand</b> , Undergraduate internship on bicategorical models of Linear Logic
2023-2024	<b>Farzad Jafarrahmani</b> (with A. Guatto), Postdoc on guarded fixpoints in reactive programming
2023	<b>Zeinab Galal</b> , Postdoc on bicategorical semantics of fixpoints and reactive programming
2022-NOW	<b>Émilie Thome</b> (CIFRE at Renault), PhD on Reactive programming applied to formal functional specification and modelisation for automotive
2020-NOW	<b>Ada Vienot</b> (with A. Guatto), PhD on Reactive Systems and Linear logic
2018-2021	<b>Zeinab Galal</b> (with T. Ehrhard and L. Vaux), PhD on combinatorial species and syntactic differential equations <i>Now, she is postdoc with Nicola Gambino, Leeds, UK</i>
2016-2021	<b>Rémi Nollet</b> (with A. Saurin), PhD on temporal logic and reactive programming <i>Now, he is teacher in Classes Préparatoires</i>
2016-2019	<b>Jules Chouquet</b> (with L. Vaux), PhD on resource semantics of programs <i>Now, he is assistant professor at Université d'Orléans</i>
2016-2017	<b>Shane Mansfield</b> , Post-doc on semantics of quantum programming <i>Now, he is computer scientist specialist of quantum algorithms at Quandela</i>
2015	<b>Hugo Paquet</b> , Master internship on probabilistic programs semantics <i>Now, he is Postdoc with Luke Ong, Oxford, UK</i>
2013	<b>Marie Kerjean</b> , Master internship on semantics of differential linear logic <i>Now, she is researcher at CNRS, Paris, France. She has been awarded the L'OREAL UNESCO Young Talent fellowship.</i>
2011	<b>Martin Bodin</b> , Master internship on proof theory (with S. Gimenez). <i>He is researcher at INRIA, Grenoble, France</i>

## PhD Committees

2024	Rémy Cerda (Université Aix Marseille), Ralph Sarkis (ENS Lyon)
2023	Farzad Jabarrahmani (Université Paris Cité), Nicolas Nalpon (ENAC, Toulouse), Baptiste Pollien (Supaero, Toulouse)
2022	Guillaume Ambal (Université de Rennes), Christophe Lucas (ENS Lyon)
2021	Alexandre Goy (Université Paris Saclay), Martin Pépin (Sorbonne Université)
2020	Marc Devisme (ÉNS Lyon), Federico Olimpieri (Université d'Aix-Marseille)
2019	Raphaëlle Crubillé (Université Paris VII), Renaud Villemart (Université de Lorraine)
2018	Marie Kerjean (Université Paris VII), Yann Hamdaoui (Université Paris VII)
2017	Luc Pelissier (Université Paris XIII), Fabien Reuter (Université Paris VII)

## Teaching

- 2023-NOW Full Professor (Professeure), ISAE Supaero, France  
*I am teaching Algorithms and Programming to first year engineering students and Synchronous Programming to Mastère students*
- 2021-NOW Associate Researcher, Sorbonne Université, France  
*I am teaching Probabilistic Programming at MPRI*
- 2020-2022 Full Professor (Professeure des universités), Sorbonne Université, France  
*I have taken part in the lecture of Comparison of multi-paradigm programming languages. I have also ensured the exercise classes of concurrent, reactive and distributed programming and of computability.*
- 2021-2022 Head and founder of the Master cursus Préparation à l'agrégation d'informatique in Paris. This includes designing the curriculum, recruiting 50 teachers and examiners, coordinating the convention between Sorbonne Université, Le CNAM, PSL, Université Paris Cité, Université Paris Est Créteil, and Université Paris Saclay, following 20 students either masters, PhDs, students in Écoles Normales, engineers or teachers.
- 2010-2020 Associate Professor (Maîtresse de conférences), Université Paris VII, France  
*I have been involved in various lectures taught in Computer Science Department, ranging from introductory courses to programming to more advanced Master level lectures on proofs of programs, logic, discrete mathematics and networks. I have also taught in the Master LMFI. During each year, I have fulfilled my teaching duty of around 200 hours of teaching hours except for my two maternity leaves.*
- 2018-2020 Co-head of the Master curriculum Logique Mathématique et Fondation de l'Informatique (LMFI). This includes recruiting students (25 students over 50 candidates), coordinating the curriculum, time-tables, following personally students, chairing examination boards, plus organizing internships and defenses boards.
- 2011-2018 Co-head of the undergraduate Mathematics and Computer Science bicursus  
*I have been involved in recruiting students (60 over 2000 candidates), coordinating the curriculum, time-tables, following personally students, chairing examination boards.*

## Organisation of Scientific Meetings

- 2022, 2023 Co-organizer of LAFI (Satellite workshop of POPL)
- 2022 Co-organizer of Logic of Probabilistic Programming (100 participants)
- 2020 Co-organizer of GeoCat 2020, Satellite workshop of FSCD-IJCAR 2020
- 2018 Organizer of the special session Probabilistic Programming and Higher-Order Computation at CIE2019
- 2017-NOW Active member of the scientific committee for the national monthly seminar Chocola Lyon, France (25 participants)
- 2016 Co-organizer of the International Workshop on Information and Processes WIP'16, Fontainebleau, France (25 participants)
- 2014 Organizer of the national conference JFLA'14 (50 participants)

## Institutional Responsibilities

- 2022, 2023 External member of the recruiting jury for DR2 INRIA
- 2021-NOW Head of the Master of Teaching cursus in Computer Science in Paris (Préparation à l'agrégation d'informatique). (20 students, 50 teachers).
- 2019-NOW Elected member of the computer science scientific council of the national "Institut des sciences de l'information et de leurs interactions" (INS2I) of the CNRS
- 2018-2020 Co-head of the Master of Research cursus Logique Mathématique et Fondation de l'Informatique (LMFI). (25 students, 20 teachers)
- 2017-2020 Lead of the Algebra and Computation theme of IRIF  
*gathering 20 permanents, 4 post-docs and 15 PhD students*
- 2011-2018 Co-head of the undergraduate Mathematics and Computer Science bicursus. (60 students).

## Program Committee, Reviewing

I was *co-chair* of the **international workshop** affiliated at [PoPL: Lafi 2023](#)

I was *co-chair* of the **international conference** [MFPS 2022](#)

I was *co-chair* of the **international workshop** affiliated at [PoPL: Lafi 2022](#)

I was *co-chair* of the **international conference**: [FOSSACS 2021](#).

I am engaged in the program committee for the following **international conference**: [FSCD 2022](#)

I was a member of the program committee for the **international conferences**: [MFPS 2024](#), [CALCO 2021](#), [LICS 2020](#) and [PPDP 2020](#), [POPL2020](#), [CIE 2019](#), [ICALP 2019](#), [FOSSACS 2018](#), [LICS 2017](#), [MFPS 2016](#) ; **international workshops**: [WOLLIC 2021](#), [LAFI 2019](#) (Languages for inference), [Linearity & TLLA 2018](#), [WIP 2016](#), [SD 2014](#) and **national conferences**: [JFLA 2014](#), 2013, 2012.

I am/was a reviewer for over 20 **international journals** [MSCS](#) (2015, 2017, 2018, 2024), [LMCS](#) (2010, 2017), [IC](#) (2012) and **international conferences** including: [LICS](#) (2011, 2017, 2022), [ICALP](#) (2012, 2015), [CSL](#) (2013, 2018), [FSCD](#) (2016), [FOSSACS](#) (2014, 2015, 2018), [MFPS](#) (2016, 2017), [ICTAC](#) (2015).

## Participation to Research Projects

Realise 2021-2025	Principal Investigator of the Émergence project of Paris with A. Guatto, G. Baudart, T. Ehrhard, C. Faggian, L. Mandel, M. Pagani, M. Pouzet, A. Saurin
$S^3$ 2021-2025	Principal Investigator of the ANR JCJC Project with B. Delcroix-Oger, S. Mimram, A. Saurin
Monoidal Bicategories, Linear Logic and Operad 2021-2024	Member of the ESPRC project led by N. Gambino and M. Fiore
Resource in Computation, a unified approach 2021-2024	Member of the ESPRC project led by S. Abramsky
PPS 2020-2024	Member of the ANR PRC Project with M. Avanzini, F. Breuvert, P. Clairambault, U. Dal Lago, T. Ehrhard (principal investigator), C. Faggian, C. Grellois, G. Manzonetto, D. Mazza, M. Pagani, D. Sangiorgi, B. Valiron, L. Vaux
RAPIDO 2014-2019	Member of the ANR Jeune Chercheur Project with D. Baelde, P. Clairambault, D. Pous, Y. Régis-Gianas, C. Riba, A. Saurin (principal investigator)
COQUAS 2013-2016	Member of the ANR Jeune Chercheur Project with G. Manzonetto, D. Mazza, M. Pagani (principal investigator), L. Vaux

## Popularization

2022	Table ronde <a href="#">Femmes dans le numérique : disparition réversible ?</a>
2019, 2021	Fête de la science: routing in a concrete network / Tutoring of 10 undergraduate students
May 2019	Pépité de sciences, popularization actions in high-schools: Internet and ranking
May 2018	<a href="#">Tous femmes de numérique</a> : Computer science tutoring at Science Museum <i>During half a day, we prepared 14 high-school women students to conduct visits</i>
2017-Now	Unplugged computer science club for primary school <i>This has included coordination, animation and creation of computer science workshops for 40 pupils from age 3 to 11 for five mornings over the year</i>