

Daniele Nantes Sobrinho

Short Bio

Since 2016, I have been an Adjunct Professor (tenured) at the Department of Mathematics, University of Brasília, Brazil, where I work as a member of the Theoretical Computer Science group. I am currently on leave from my permanent position and working as a Senior Researcher Fellow at the Department of Computing, at Imperial College London, working with the group Verified Software in the context of the EPSRC Project VeTSpec: Verified Trustworthy Software Specification and the project Gillian: Program Correctness and Incorrectness'. My research is focused in two main areas: equational and rewriting techniques for automatic reasoning and the study of the expressiveness of different models of computations based on encodings between concurrent and sequential programming languages. I am the co-chair of LSFA 2022 and WiL 2022, and a PC member of FSCD 2022, CICM 2022, UNIF 2022, and CSL 2023. I have been actively working on raising awareness of the participation of women in logic and related scientific fields.

Selected Publications

2022 M. Schmidt-Schauss and D. Nantes-Sobrinho. *Nominal Anti-Unification with Atom Variables*. Proc. of FSCD, pp. 7:1 - 7:22.

2022 M. Ayala-Rincón, M. Fernández, G. da Silva and D. Nantes-Sobrinho. *A Certified Algorithm for AC-unification*. Proc. of FSCD, pp. 8:1 - 8:21.

2021 M. Ayala-Rincón, W. de Carvalho Segundo, M. Fernández, G. da Silva and D. Nantes-Sobrinho. *Formalising nominal C-unification generalised with protected variables*. Math. Struct. Comput. Sci. 31(3), pp. 286-311.

2021 J. Paulus, D. Nantes-Sobrinho and J. A. Pérez. *Non-deterministic Functions as Non-deterministic Processes*. Proc. of FSCD, pp. 21:1 - 21:22.

2021 M. Ayala-Rincón, M. Fernández, D. Nantes-Sobrinho and D. Vale. *Nominal Equational Problems*. Proc of FOSSaCS, pp. 22-41.

2018 M. Ayala-Rincón, M. Fernández and D. Nantes-Sobrinho. *Fixed-Point Constraints for Nominal Equational Unification*. Proc. of FSCD, pp. 7:1 - 7:16.

2016 M. Ayala-Rincón, M. Fernández and D. Nantes-Sobrinho. *Nominal Narrowing*. Proc of FSCD, pp.11:1 - 11:17.

Election Statement

I am a regular attendee of FSCD since its creation, and I have five papers in the last seven editions of FSCD. I consider myself a member of the community, being consistently involved in the organization of workshops (UNIF, LSFA, and WiL) affiliated with FSCD 2016, 2019 and 2021, and 2022. The last seven editions have proven that FSCD is a strong and worldwide recognized conference, and is evolving together with the new developments in logical and mathematical foundations of computer science, becoming more attractive as a source of robust contributions.

I am part of a strong community in South America that is consistently contributing to the field, and that has been actively participating in FSCD, even during the pandemic editions that have proven challenging for science in general. If elected, I will continue with this honorable effort of making the FSCD an accessible, attractive, and balanced space, which is well-known for its solid work and good interaction between theory and practice of computer science.