

## Personal data

Title	Dr.
First name	Luiz Fernando
Name	de Oliveira Chamon
Current position	ELLIS–SimTech Independent research group leader (10/2022–09/2026)
Current institution, country	University of Stuttgart, Germany
Identifiers/ORCID	<a href="#">0000-0001-7731-6650</a>

## Qualifications and Career

Stages	Periods and Details
Degree program	<i>Polytechnic School of the University of São Paulo, Brazil</i> 02/2012–02/2015 M.Sc. in Electrical Engineering Dissertation: Combinations of Adaptive Filters Advisor: Cássio Guimarães Lopes
	<i>École Centrale de Lyon and INSA-Lyon, France</i> 01/2009–06/2009 Undergraduate exchange student of the M.Sc. in Acoustics program
	<i>Polytechnic School of the University of São Paulo, Brazil</i> 02/2006–05/2011 B.Sc. in Electrical Engineering (Electronic Systems)
Doctorate	<i>University of Pennsylvania, USA</i> 09/2015–12/2020 Ph.D. in Electrical Engineering Thesis: Constrained learning and inference Advisor: Alejandro Ribeiro
Stages of academic and professional career	<i>University of Stuttgart, Germany</i> 10/2022–present ELLIS–SimTech Independent research group leader
	<i>University of California, Berkeley, USA</i> 07/2021–09/2022 Postdoctoral fellow at the Simons Institute for the Theory of Computing
	<i>University of Pennsylvania, USA</i> 10/2020–06/2021 Postdoctoral researcher

## Engagement in the Research System

*Women in STEM* 04/2022

Judge of the [ENVISION research competition](#)

*University of Pennsylvania* 05/2020–12/2020

COVID-19 Research and Academic Safety Reporting Committee

*University of Pennsylvania* 06/2018–07/2018 and 06/2019–07/2019

Mentor for the research experience for undergraduate program [SUNFEST](#)

### Reviewer/referee

IEEE Trans. on Signal Processing; IEEE Signal Processing Letters; IEEE Signal Processing Magazine; IEEE Journal of Selected Topics in Signal Processing; IEEE Trans. on Signal and Information Processing over Networks; IEEE Trans. on Automatic Control; IEEE Trans. on Control of Network Systems; and conferences, such as NeurIPS, ICML, IEEE ICASSP, IEEE CDC...

## Scientific Results

### Category A

- [1] S. Paternain, M. Calvo-Fullana, **L. F. O. Chamon**, and A. Ribeiro. Safe policies for reinforcement learning via primal-dual methods. *IEEE Trans. on Autom. Control.* (accepted), 2023. DOI: [10.1109/TAC.2022.3152724](https://arxiv.org/abs/1911.09101). URL: <https://arxiv.org/abs/1911.09101>.
- [2] **L. F. O. Chamon**, S. Paternain, M. Calvo-Fullana, and A. Ribeiro. Constrained learning with non-convex losses. *IEEE Trans. on Inf. Theory*, 2022. DOI: [10.1109/TIT.2022.3187948](https://arxiv.org/abs/2103.05134). URL: <https://arxiv.org/abs/2103.05134>.
- [3] A. Robey\*, **L. F. O. Chamon\***, G. J. Pappas, H. Hassani, and A. Ribeiro. Adversarial robustness with semi-infinite constrained learning. In *Conference on Neural Information Processing Systems (NeurIPS)*, 2021. URL: <https://arxiv.org/abs/2110.15767>. (\* equal contribution).
- [4] **L. F. O. Chamon**, G. J. Pappas, and A. Ribeiro. Approximate supermodularity of Kalman filter sensor selection. *IEEE Trans. on Autom. Control.*, 66[1]:49–63, 2021. DOI: [10.1109/TAC.2020.2973774](https://arxiv.org/abs/1912.03799). URL: <https://arxiv.org/abs/1912.03799>.
- [5] D. S. Kalogerias, **L. F. O. Chamon**, G. J. Pappas, and A. Ribeiro. Better safe than sorry: Risk-aware nonlinear Bayesian estimation. In *IEEE International Conference in Acoustic, Speech, and Signal Processing (ICASSP)*, 2020. URL: <https://arxiv.org/abs/1912.02933>.
- [6] **L. F. O. Chamon**, Y. C. Eldar, and A. Ribeiro. Functional nonlinear sparse models. *IEEE Trans. on Signal Process.*, 68[1]:2449–2463, 2020. DOI: [10.1109/TSP.2020.2982834](https://arxiv.org/abs/1811.00577). URL: <https://arxiv.org/abs/1811.00577>.
- [7] **L. F. O. Chamon**, S. Paternain, and A. Ribeiro. Trust but verify: Assigning prediction credibility by counterfactual constrained learning, 2020. URL: <https://arxiv.org/abs/2011.12344>.
- [8] **L. F. O. Chamon** and A. Ribeiro. Probably approximately correct constrained learning. In *Conference on Neural Information Processing Systems (NeurIPS)*, 2020. URL: <https://arxiv.org/abs/2006.05487>.
- [9] M. Eisen, C. Zhang, **L. F. O. Chamon**, D. D. Lee, and A. Ribeiro. Learning optimal resource allocations in wireless systems. *IEEE Trans. on Signal Process.*, 67[10]:2775–2790, 2019. DOI: [10.1109/TSP.2019.2908906](https://arxiv.org/abs/1807.08088). URL: <https://arxiv.org/abs/1807.08088>.
- [10] **L. F. O. Chamon** and A. Ribeiro. Approximate supermodularity bounds for experimental design. In *Conference on Neural Information Processing Systems (NeurIPS)*, pages 5403–5412, 2017. URL: <https://arxiv.org/abs/1711.01501>.

### Category B

- [1] J. Cervino, **L. F. O. Chamon**, B. D. Haeffele, R. Vidal, and A. Ribeiro. Learning globally smooth functions on manifolds, 2022. URL: <https://arxiv.org/abs/2210.00301>.
- [2] I. Hounie, **L. F. O. Chamon**, and A. Ribeiro. Automatic data augmentation via invariance-constrained learning, 2022. URL: <https://arxiv.org/abs/2209.15031>.
- [3] B. A. Angélico, **L. F. O. Chamon**, S. Paternain, A. Ribeiro, and G. J. Pappas. Source seeking in unknown environments with convex obstacles. In *American Control Conference*, 2021. URL: <https://arxiv.org/abs/1909.07496>.
- [4] M. Calvo-Fullana, S. Paternain, **L. F. O. Chamon**, and A. Ribeiro. State augmented constrained reinforcement learning: Overcoming the limitations of learning with rewards, 2021. URL: <https://arxiv.org/abs/2102.11941>.
- [5] L. Ruiz, **L. F. O. Chamon**, and A. Ribeiro. Transferability properties of graph neural networks, 2021. URL: <https://arxiv.org/abs/2112.04629>.

### Academic Distinctions

- **2020:** Best student paper award at IEEE ICASSP 2020 for “The empirical duality gap of constrained statistical learning.”
- **2020:** Best paper award at IEEE ICASSP 2020 for “Better safe than sorry: Risk-aware nonlinear Bayesian estimation.”
- **2018:** Outstanding editorial board service (IEEE Transactions on Signal Processing).
- **2018:** Best Ph.D. colloquium award  
(Dept. of Electrical and Systems Engineering, University of Pennsylvania).
- **2018:** Good citizen award for services to the department  
(Dept. of Electrical and Systems Engineering, University of Pennsylvania).
- **2013:** IEEE Standard Education Committee grant.
- Travel grants to major conferences: IEEE ICASSP, IEEE CDC, NeurIPS, and USENIX NSDI.

### Data protection and consent to the processing of optional data

If you provide voluntary information (marked as optional) in this CV, your consent is required. Please confirm your consent by checking the box below.

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”<sup>1</sup> in connection with the DFGs review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may revoke my consent in whole or in part at any time—with effect for the future, freely and without giving reasons—vis-à-vis the DFG ([postmaster@dfg.de](mailto:postmaster@dfg.de)). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit special categories of personal data relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

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