CURRICULUM VITAE

Personal information

Name	Jorge Eduardo Ramírez Ruiz
E-mail	jorgeerrz@gmail.com, jorge.ramirez@upf.edu

Education

2018 - present	PhD candidate in Information and Communication Technologies (Neuroscience) at the Universitat Pompeu Fabra (UPF) in Barcelona, Spain.
2016 – 2018	Master in Physics at Université de Sherbrooke, Canada.
2011 – 2016	Bachelor of Science, Physics at Universidad Nacional Autónoma de México (UNAM).

Publications

2022

Ramírez-Ruiz, J., Grytskyy, D. & Moreno-Bote, R. (2022). "Seeking entropy: Complex behaviors from intrinsic motivation to occupy action-state path space". arXiv: 2205.10316.

2021

Ramírez-Ruiz, J., & Moreno-Bote, R. (2021). "Optimal allocation of finite sampling capacity in accumulator models of multi-alternative decision making." Cognitive Science, 46(5), e13143.

2020

Moreno-Bote, R., Ramírez-Ruiz, J., Drugowitsch, J., & Hayden, B. Y. (2020). "Heuristics and optimal solutions to the breadth–depth dilemma." PNAS, 117(33), 19799-19808.

2017

Ramírez-Ruiz, J., Boutin, S., & Garate, I. (2017). "NMR in an electric field: A bulk probe of the hidden spin and orbital polarizations." Physical Review B, 96(23), 235201. Editors' suggestion.

2016 Boutin, S., Ramírez-Ruiz, J., & Garate, I. (2016). "Tight-binding theory of NMR shifts in topological insulators Bi2Se3 and Bi2Te3." Physical Review B, 94(11), 115204.

Conferences

2021	Poster at the Spanish Neuroscience Society conference (SENC).

Ramírez-Ruiz, J., Anzai, A., Drugowitsch, J., DeAngelis, G. and Moreno-Bote R. “Behavioral mechanisms underlying visually-guided control of steering”.

Poster at COSYNE.

Ramírez-Ruiz, J. and Moreno-Bote, R. “Optimal allocation of finite sampling capacity in accumulator models of multi-alternative decision making”.

Poster at the BARCCSYN conference.

Ramírez-Ruiz, J., Mastrogiuseppe, C. and Moreno-Bote, R. “Magic number five: The breadth–depth dilemma in accumulator and tree-like models of decision making.”

Teaching (assistantships)

2021 Introduction to Network Science/Spanish (UPF)

Computational Neuroscience/English (UPF)

Linear Algebra/Spanish (UPF)

2020 Computational Neuroscience/English (UPF)

Calculus/Spanish (UPF)

2018 Statistical Physics II/French (Université de Sherbrooke).

2015 Statistical Physics (UNAM).

Modern Physics/Spanish (UNAM).

Funding and research stays

2022 Summer research stay at the noiseLab led by Becket Ebitz.

2019 Doctoral scholarship FPI (Spanish Education Ministry).

2016 Mitacs Globalink Graduate Fellowship for a Master’s degree in Canada.

2015 Mitacs Globalink research internship at the Université de Sherbrooke.

Schools and exchanges

2020 Neuromatch Academy, interactive track.

2019 Cellular, Computational and Cognitive Neuroscience Summer School at Princeton University, USA.

2018 49th IFF Spring school “Physics of Life” in Jülich, Germany.

2013 Exchange semester at the University of California, Santa Barbara.

Technical skills

Programming languages: Julia, C++ and knowledge of Python and Matlab.

Experience with parallel computing techniques PyCUDA and OpenMP.

Languages

Fluent in Spanish, English and French. Basic knowledge of Italian.

Further accomplishments

2010 International Baccalaureate, Diploma Programme. Score of 39 out of 45 points.

Silver medal representing Mexico at the Ibero-American Physics Olympiad held in Panama City, Panama.