

CURRICULUM VITAE
Daniel E. Lopez-Fogliani

- **Investigador independiente CONICET**, IFIBA/DF, Universidad de Buenos Aires & CONICET
- **Profesor protitular** (Prof. asociado, regular, simple), Pontificia Universidad Católica Argentina

Author with: more than 35 published articles, h=19 (INSPIRE), h=15 (SCOPUS)
more than 1000 citations in inSPIRE (more than 750 in SCOPUS)

May 2023

E-mail: daniel.lopez@df.uba.ar or daniellopez@uca.edu.ar

Website: <http://users.df.uba.ar/daniel.lopez/>

Dr. Daniel LOPEZ
IFIBA (Universidad de Buenos Aires & CONICET)
Departamento de Física, DF, FCEyN, Pabellón I,
Ciudad Universitaria, Universidad de Buenos Aires, UBA
1428 Ciudad de Buenos Aires
Argentina



Responsible of the Astroparticle and Particle Physics Group
APgroup, IFIBA/DF UBA-CONICET <http://apgroup.df.uba.ar/>



Major Field Research

Theoretical Physics (Phenomenology)

- *Particle Physics*
Supersymmetric Standard Model Phenomenology: Collider Physics, Neutrino Physics, Higgs Physics.
- *Astroparticle Physics*
Dark Matter candidates: Direct and Indirect Detection Searches.

2007: *PhD in theoretical Physics* at the "Universidad Autónoma de Madrid", Spain.

2007-2010: *Research Associate* (three years STFC postdoctoral contract, 2007-2010 north hemisphere academic years) at the Department of Physics & Astronomy, University of Sheffield, United Kingdom.

2010-2012: *Research Associate* (two years CNRS postdoctoral contract, 2010-2012 north hemisphere academic years) at the "Laboratoire de Physique Théorique", "Université de Paris-Sud XI", France.

Since 2012 CONICET researcher at IFIBA/DF, Universidad de Buenos Aires & CONICET.
Professor since 2016 at Pontificia Universidad Católica Argentina, UCA.

Rank since 2022: "investigador independiente", IFIBA/DF, UBA & CONICET
Associate professor, "profesor protitular, regular, simple", UCA

Summary of most relevant lines of research

Physics beyond the standard model: Theoretical search for new particles and fundamental interactions. Proposal for new physics searches at the LHC and dark matter experiments. Particularly in the context of well-motivated extensions of the standard model, as for instance the μ -from-v supersymmetric standard model, $\mu vSSM$.

Five articles selected by the author as the most important or representative:

- D. E. Lopez-Fogliani, C. Muñoz, "Searching for Supersymmetry: The $\mu vSSM$ ", A short review of the $\mu vSSM$, *Eur. Phys. J. Spec. Top.* **229**, 3263–3301 (2020) [arXiv:2009.01380 [hep-ph]].
- J. A. Aguilar-Saavedra , D. E. López-Fogliani, C. Muñoz, "Novel signatures for vector-like quarks", *JHEP* **1706** (2017) 095 [arXiv:1705.02526 [hep-ph]].
- G. A. Gomez-Vargas, D. E. Lopez-Fogliani, C. Munoz, A. D. Perez, R. Ruiz de Austri, "Search for sharp and smooth spectral signatures of $\mu vSSM$ gravitino dark matter with Fermi-LAT", *JCAP* **03** (2017) 047 [arXiv:1608.08640 [hep-ph]].
- D. E. López-Fogliani, L. Roszkowski, R. Ruiz de Austri, T. A. Varley, "A Bayesian Analysis of the Constrained NMSSM", *Phys. Rev.* **D80** (2009) 095013 [arXiv:0906.4911 [hep-ph]].
- Daniel E. López-Fogliani and C. Muñoz, "Proposal for a Supersymmetric Standard Model", *Phys. Rev. Lett.* **97** 041801 (2006) [arXiv: hep-ph/0508297] (the article where we propose the $\mu vSSM$).

Citation Summary (inSPIRE): <https://inspirehep.net/authors/1066278?ui-citation-summary=true>
(SCOPUS): <https://www.scopus.com/authid/detail.uri?authorId=8672960700>

Dr. Daniel Elbio LOPEZ-Fogliani

Astroparticle and Particle Physics group

Permanent full-time CONICET Researcher, IFIBA/DF UBA-CONICET
Associate Professor, UCA

<http://users.df.uba.ar/daniel.lopez/> & <http://apgroup.df.uba.ar/>

Note: very brief version of the CV, for a complete CV please contact Dr. Daniel E. LOPEZ-Fogliani