

Rodrigo Dorantes-Gilardi

✉ rodrigo.dorantes-gilardi@ens-lyon.fr

IXXI

École normale supérieure de Lyon
46, Allée d'Italie
69007 Lyon
France

Born: 24 April 1990

Nationality: Mexican/Spanish

Web: <https://rodogi.github.io>

Education

2016–2018	PhD 2nd-half. Under supervision of Claire Lesieur, <i>IXXI, École normale supérieure de Lyon, France</i> “Bio-mathematical aspects of the plasticity of protein folding”
2014–2016	PhD 1st-half, Under supervision of Laurent Vuillon, <i>LAMA, Le Bourget-du-Lac, France.</i> “Bio-mathematical aspects of the plasticity of protein folding”
2014	Master thesis supervised by Gelasio Salazar, <i>Universidad Autónoma de San Luis Potosí, Mexico</i> “An algorithm in python on the minium crossing number of complete graphs”.
2012–2014	Master degree in applied mathematics, <i>Universidad Autónoma de San Luis Potosí, Mexico.</i>
2008–2012	Bachelor degree in economics, <i>Université de Toulouse Capitole, France.</i>
2005–2008	High School diploma, option: General Sciences, <i>Instituto Tecnológico de Estudios Superiores de Monterrey, Mexico.</i>

Publications

Articles

2018 (Submitted)	R. Dorantes-Gilardi et al. <i>Protein Structure Plasticity: the Neighborhood Watch.</i> Nature Structural & Molecular Biology
2018 (Submitted)	R. Dorantes-Gilardi et al. <i>A Network Approach to Perturbation of Protein Structure.</i> Applied Network Science
2016 (May)	Achoch et al. <i>Protein structural robustness to mutations: an in silico investigation.</i> Phys. Chem. Chem. Phys., 18 , 13770 (2016)

Chapters

- | | |
|----------------------------|--|
| 2018
(Submitted) | R. Dorantes-Gilardi et al.
<i>Induced Graphs: surfing on protein structures.</i>
Allostery and protein dynamics: from physical chemistry to drug discovery
Springer <i>Methods in Molecular Biology</i> |
|----------------------------|--|

Proceedings

- | | |
|----------------------|--|
| 2017
(Dec) | R. Dorantes-Gilardi et al.
<i>Perturbation of amino acid networks: A statistical study of the defects introduced in proteins by mutations.</i>
The 6th International Conference on Complex Networks and Their Applications |
|----------------------|--|

Talks

- | | |
|---------------------------|--|
| 2016
(May) | Workshop on Mechanisms underlying local to global signals in networks
IXXI, École Normale Supérieure de Lyon, France. |
| 2016
(March) | Workshop on Advanced mathematics for network analysis
Luchon, France. |
| 2015
(June) | Workshop on protein fibers: from pathology to nanomaterial
École Normale Supérieure de Lyon, France. |
| 2015
(April) | IXXI Seminar
École Normale Supérieure de Lyon, France. |
| 2014
(December) | Theoretical Approaches for the Genome and the proteome
Bourget-du-Lac, France. |

Conferences and Schools

- | | |
|------------------------|---|
| 2016
(April) | <i>Spring school of theoretical informatics.</i>
CIRM, Marseille, France. |
| 2016
(March) | <i>School for young researchers in mathematical informatics.</i>
IMJ-PRG, Paris, France. |
| 2015
(Jan.) | <i>School Algorithms and Heuristics for Large-scale Data Sets.</i>
École Normale Supérieure de Lyon, Lyon, France. |
| 2014
(Nov.) | <i>Lyon systems biology.</i>
École Normale Supérieure de Lyon, Lyon, France. |

Organization

2014 (December)	Theoretical Approaches for the Genome and the proteome Bourget-du-Lac, France.
---------------------------	---

Skills

Python	Advanced (numpy, pandas, matplotlib, networkx, biopython)
Tex	Intermediate
Elisp	Intermediate
C	basic
SQL	basic
Git	Intermediate
Linux/GNU	Intermediate
Bash (zsh)	Intermediate
HTML, CSS	Intermediate

Posters

2017 (Dec)	The 6th International Conference on Complex Networks and Their Applications Lyon, France.
2015 (May)	Inter'Actions 2015 Grenoble, France.

Languages

Spanish	Reading, Writing, Speaking: Native language.
English	Reading, Writing, Speaking: Fluent.
French	Reading, Writing, Speaking: Fluent.