



PAOLO RISSONE  
WORK EXPERIENCE

10/2018 – 02/2022 Barcelona, Spain

**Adjunct Professor** University of Barcelona  
Laboratory of Mechanics, Faculty of Physics, Bachelor Degree in Physics.

03/2019 – 06/2019 Barcelona, Spain

**Tutor Bachelor Degree Thesis** Universidad de Barcelona

Tesis: Conformational Dynamics in a Multi-State Molecular Free-Energy Landscape | Estudiante: Nil Mont Geli. Advisor: Maria Mañosas

01/2018 – 03/2018 Barcelona, Spain

**Research associate in university** Small Biosystems Lab, University of Barcelona

EDUCATION AND TRAINING

2018 – 2023 Barcelona, Spain

**Ph.D. in Physics** University of Barcelona

Address Carrer de Martí i Franquès, 1-11, 08028, Barcelona, Spain Website <http://ffn.ub.es/ritort/> Field of study Physics, Statistics, Biology

Final grade Cum Laude | Level in EQF EQF level 8 | Thesis Thermodynamics and Kinetics of Nucleic Acids Folding

2015 – 2017 Roma, Italy

**Master Degree in Physics "La Sapienza"** University of Roma

Licenciado con una nota media final de 110/110 cum Laude

Final grade 110/110 Cum Laude | Level in EQF EQF level 7 | Thesis Forces Correlation in Jammed Hard Spheres

2011 – 2015 Roma, Italy

**Bachelor Degree in Physics "La Sapienza"** University of Roma

Licenciado con una nota media final de 102/110

Field of study Physics | Final grade 102/110 | Level in EQF EQF level 6 | Thesis Berry's Phase

2007 – 2011 Roma, Italy

**Classical High-School Diploma** Liceo Classico "E. Q. Visconti"

Field of study Education | Final grade 96/100 | Level in EQF EQF level 4

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

Other language(s): English

Listening C2  
Reading C2 Writing C2

Spoken production C2  
Spoken interaction C2

Spanish Listening C2  
Reading C2 Writing C2

Spoken production C2  
Spoken interaction C2

## French

Listening A2

Reading A2 Writing A1

Spoken production A2

Spoken interaction A2

Catalan Listening C1

Reading C1 Writing A1

Spoken production A1

Spoken interaction A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## DIGITAL SKILLS

Python | Matlab/Simulink | C / C++ / C+ | Bash - Shell | Microsoft Office (Outlook, Excel, Word, PowerPoint)

## ADDITIONAL INFORMATION

### Honours and awards

01/2022 Spanish Biophysical Society, Madrid, Spain

Paper of the Month: "Stem-loop formation drives RNA folding in mechanical unzipping experiments"

07/2021 American Physical Society, New York, US.

Editors' Suggestion: "Long-range anomalous decay of the correlation in jammed packings"

11/2021 "Angelo della Riccia" Foundation, Florence, Italy Scholarship

11/2020 "Angelo della Riccia" Foundation, Florence, Italy Scholarship

11/2019 "Angelo della Riccia" Foundation, Florence, Italy

Scholarship

07/2017 "La Sapienza" University of Rome, Rome, Italy Percorso di

Eccellenza

### Publications

Efficient methods for determining folding free energies in single-molecule pulling experiments

A. Severino, P. Rissone, A. M. Monge and F. Ritort, *Journal of Statistical Mechanics: Theory and Experiments*, 2019.

Long-range anomalous decay of the correlation in jammed packings

P. Rissone, E. I. Corwin, and G. Parisi, *Phys. Rev. Lett.*, vol. 127, no. 3, p. 038001, 2021.

Stem-loop formation drives rna folding in mechanical unzipping experiments

P. Rissone, C. V. Bizarro, and F. Ritort, *Proc. Natl. Acad. Sci. U.S.A.*, vol. 119, no. 3, 2022.

Nucleic acid thermodynamics derived from mechanical unzipping experiments

P. Rissone and F. Ritort, *Life*, vol. 12, no. 7, p. 1089, 2022.

Experimental test of Sinai's model in DNA unzipping

C. Ter Burg, P. Rissone, M. Rico-Pasto, F. Ritort, and K. J. Wiese, *Phys. Rev. Lett.*, vol. 130, no. 20, p. 208401, 2023.

Nucleic acid thermodynamics derived from mechanical unzipping experiments

P. Rissone, I. Pastor, and F. Ritort, *RNA structure and function* (J. Barciszewski, ed.), pp. 73-91, Springer, 2023.

### Seminars & Conferences

Single-Molecule Sensors and nanoSystems International Conference, PremC, Barcelona, Spain.

Oral presentation. November 2023

**2nd Biology for Physics Conference - Biological evolution and nonequilibrium physics: close encounters,**  
**European Physical Society, Barcelona, Spain.** Poster presentation. July 2022

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**Physical Review Journal Club: Live discussions with authors**

**Giorgio Parisi and team discuss the configuration of jammed packings,** American Physical Society. March 2022

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**7th International Iberian Biophysics Congress, Sociedad de Biofisica de Espagna y Portugal, Coimbra, Portugal.**

Poster Presentation. June 2021

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**40 Years of Replica Symmetry Breaking, Università di Roma "La Sapienza", Rome, Italy**

Poster Presentation. September 2019

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**UBics Day, University of Barcelona, Barcelona, Spain**

Poster Presentation. June 2019

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**6th International Iberian Biophysics Congress and X Iberoamerican Congress of Biophysics, Sociedad de Biofisica de España, Castellón, Spain**

Poster Presentation. June 2018

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