

# SUANNO ROCCO

📍 Lyon, France

Physicist, 1st year PhD Candidate



Date of birth: 22/01/2001

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## ABOUT ME

Passionate about the broad spectrum of physics, I'm more interested in theoretical subjects, while maintaining a curiosity for experimental applications, especially in solid-state physics. I obtained my master's degree in solid-state physics and quantum technologies from University of Milano-Bicocca and then I moved to Lyon for an internship at the Institut Lumière Matière, where I'm currently pursuing my PhD. The goal of my PhD project is to develop a model for the control of nano-scale structures on crystal surfaces using spatio-temporal driving forces, such as growth or electric fields.

## EXPERIENCE

### Institut Lumière Matière

Lyon, France

*PhD Candidate*

October 2024 – Present

- Optimal Nano-structure design at crystal surfaces

**Supervisors:** ✉ [olivier.pierre-louis@univ-lyon1.fr](mailto:olivier.pierre-louis@univ-lyon1.fr); [thierry.biben@univ-lyon1.fr](mailto:thierry.biben@univ-lyon1.fr)

**Keywords:** Theory and modeling; Non-equilibrium statistical physics; Nonlinear dynamics; Optimal control.

*Intern*

February 2024 – July 2024

- Control of phase separating system close to criticality

**Supervisors:** ✉ [olivier.pierre-louis@univ-lyon1.fr](mailto:olivier.pierre-louis@univ-lyon1.fr); [francesco.montalenti@unimib.it](mailto:francesco.montalenti@unimib.it)

**Keywords:** Control theory; Spinodal decomposition; Allen-Cahn equation; Time-dependent Ginzburg-Landau equation.

### Università degli studi di Milano-Bicocca

Milano, Italy

*Intern*

April 2022 – September 2022

- The standard map: chaoticness and first passage times

**Supervisor:** ✉ [giampaolo.cristadoro@unimib.it](mailto:giampaolo.cristadoro@unimib.it)

**Keywords:** Chaos in dynamical systems; Random walks; First passage times.

## LABORATORY EXPERIENCE

### Università degli studi di Milano-Bicocca

Milano, Italy

*Laboratory of quantum technologies*

September 2022- July 2023

**Keywords:** Superconducting qubit; Parametric amplification; RF transmission line; Low temperature physics.

*Laboratory of computational physics*

September 2021- July 2022

**Keywords:** Interpolation; Optimization; Integration; Random-walk on graph; Schrödinger Equation.

## EDUCATION

### Université Claude Bernard Lyon 1

Lyon, France

*PhD Student, Non-equilibrium physics and non-linear dynamics*

October 2024 – Present

### Università degli studi di Milano-Bicocca

Milano, Italy

*Master in solid-state physics and quantum technologies*

September 2022 – September 2024

## TECHNICAL SKILLS

**Operating systems:** Linux, Microsoft Windows

**Languages:** Python, C, Matlab, Bash

## LANGUAGES

Fluent in Italian (Native language) - Professional level in English - Good level in French