



# Bruno M. Ronchi

## M.Sc. in Physics

Age: 26 (1994)

E-mail: [brunom.ronchi@gmail.com](mailto:brunom.ronchi@gmail.com)

Currently in: Junín, Buenos Aires, Argentina.

Reallocation is a non-issue.

## Education

**Aug. 2019 - Feb. 2021, in Balseiro Institute, Argentina**

**M.Sc. in Physics**

**Thesis:** "Amplifying information of quantum sensors with Quantum Zeno Effect"

**Advisor:** Dr. Gonzalo Agustín Álvarez.

**Tutor:** Dr. Analía Zwick.

**Nuclear Magnetic Resonance Spectroscopy and Imaging Laboratory,**

Medical Physics Department, Bariloche Atomic Center.

Bariloche Atomic Center.

**Acquired knowledges:** mainly on the fields of (quantum) parameter estimation. Also include OOP (C++), parallel programming (CUDA/OpenCL), probability theory, information theory, and fundamentals of machine learning.

**Aug. 2016 - Dec. 2020, in Balseiro Institute, Argentina**

**B.Sc. in Physics**

**Thesis:** "Amplifying information of quantum sensors with Quantum Zeno Effect"

**Advisor:** Dr. Gonzalo Agustín Álvarez.

**Tutor:** Dr. Analía Zwick.

**Nuclear Magnetic Resonance Spectroscopy and Imaging Laboratory,**

Medical Physics Department, Bariloche Atomic Center.

**Acquired knowledges:** mathematical reasoning, fundamentals of physics: Classical Mechanics, Thermodynamics, Statistical Mechanics, Electromagnetism, and Quantum Mechanics. Programming (C), experimental research skills.

**Average score:** 8.00, scale from 0 (worst) to 10 (best).

**Feb. 2013 - June 2016, in National University of Rosario, Argentina**

**First years of B.Sc. in physics,** validating the subjects pre-required for entry at the Balseiro institute.

## Skills

**Languages**

Spanish (Native), English (Fluent), C and C++, Python, LaTeX.

# Experience

## Posters and talks

Talk at the Q-Turn 2020 Workshop, Online. – November 23-27 2020.

Poster at the Annual Encounter of Nanoscience and Nanotechnology Institute, 2020, Online. – July 21-23 2020.

Poster for the Advanced Laboratory subject's final examination – May 31, 2018.

## Attended conferences

XXI Giambiagi Winter School 2019, Bs. As., Argentina. Quantum simulations and quantum metrology with cold trapped ions – July 15-24 2019.

Annual Meeting of Physics 2018, Bs. As., Argentina.

My github: <https://github.com/NotBru>.

# Honors

## Scholarships through my studies

Complete scholarship during the M.Sc. in Balseiro Institute.

Complete scholarship during the B.Sc. in Balseiro Institute.