



Rafael Tiedra

Mathematical physicist with various years of experience in research, IT, education and administration.

Date of birth 05.03.1976

Nationality Swiss and Spanish

Languages French (native), English and Spanish (fluent)

Skills

Research and teaching

Problem-solving, research in physics and mathematics (40+ scientific publications)

Scientific presentation/vulgarization (130+ talks)

Classroom and online teaching

Academic and corporate administration

Management, budgets, fundraising, organisation of events and conferences

Writing and editing publications, popular science, translation, digital communication

Recruitment process, conception of curriculums, project management

Programming

Languages/skills: Python, SQL, Machine Learning, Jupyter, Git, VSCode, MATLAB, HTML, LaTeX

IT: MS Office, Linux, Windows OS

Professional experiences

2022-present **Data Scientist**, Department of Data Science and Artificial Intelligence, Geneva State, Switzerland.

2021-2022 **Visiting professor**, Swiss Federal Institute of Technology Lausanne, Switzerland.

2009-2022 **Professor**, Pontifical Catholic University, Chile.

2005-2009 **Postdoctoral researcher**, Universities of Paris-Sud and Cergy-Pontoise, France.

Studies

June 2005 **PhD in Physics**, University of Geneva.

October 2001 **BSc in Mathematics**, University of Geneva.

July 2001 **MSc in Physics**, University of Geneva.

Prizes and research grants

2009, 2013, 2017, 2021 Chilean Fondecyt grants (501'000 USD)

2009, 2014 Chilean Milenio grants (2'338'000 USD)

2011 French-Chilean ECOS-CONICYT grant

2005, 2007 Swiss NSF grants (138'000 USD)

2001 Fanny Wurth scholarship

2001 Hans Wilsdorf scholarship (Rolex)

1998, 1999, 2000, 2001 Canton of Geneva scholarships