

# 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 (44 scientific publications) Scientific presentation/vulgarization (125 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, conception of curriculums, project management

# **Programming**

**Languages/skills:** Python, SQL, Machine Learning, MATLAB, Jupyter, HTML, Git, LaTex **IT:** MS Office, Linux, Windows OS

# Professional experiences

2022-present Data Engineer, Geneva's Government - OCSIN, Switzerland

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

2009-2022 Associate 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

### Interests and hobbies

Science, jazz, finance, badminton