

# 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

Aug. 2022-present Data Scientist, Department of Data Science and AI, Geneva State, Switzerland.

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

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

Oct. 2005-Dec. 2008 **Postdoctoral researcher**, Universities of Paris-Sud and Cergy-Pontoise, France.

#### Studies

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

Oct. 2001 BSc in Mathematics, University of Geneva.

June 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