



# 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