

27th August, 2017

WORK EXPERIENCE

- Aug. 2017 – present** **Banc Sabadell**
Analyst Financial regulation compliance. Analysis and review of financial policies and procedures.
- Oct. 2013 – present** **Associació Quadrivium per la Divulgació (non-profit)**
Founder and Secretary Science outreach activities. Mentoring of communication skills among young scientists.
<http://www.quadrivium.cat/> 
- June 2016 – Nov. 2016** **Better Consultants**
IT Consultant HOST analyst and developer at Banc Sabadell.
PMO Design and Deployment Programme Management (Banc Sabadell).
- Nov. 2015 – June 2016** **Editorial Vicens Vives**
Technical Editor Update of high school physics textbooks to L.O.M.C.E. education law.
- Oct. 2011 – Sept. 2015** **University of Barcelona**
Predoctoral researcher History of the Quantum Theory. Science outreach conferences and interviews (TV3, RAC1).
Teaching assistant Introductory and advanced courses in Physics, Maths, Engineering and History of Science.
- June 2009 – Sept. 2015** **Encontres amb el Tercer Cicle**
Coordinator and logistics Management of periodic event with the aim to establish a scientific network between predoctoral researchers and undergraduate students. Leading a 5–10 people team. 50+ invited speakers. Audience reach of ~1500 students.
<http://www.ub.edu/fisica/encontres> 
- Oct. 2009 – Oct. 2011** **European Organization for Nuclear Research (CERN)**
Predoctoral researcher Project LHCb: Simulation of experimental particle physics. Big data and statistical analysis.
Project CLIC: Assessment of detector design and simulation. Hardware simulation.
- May 2005 – July 2010** **Centre Acadèmic Pié**
Founder and manager Private tuition center for students with learning difficulties. Levels: elementary, high school, university. Coordination of a 8–12 teacher team. 150–200 students per academical year.
<http://academia.pie.cat> 

EDUCATION BACKGROUND

- Dec. 2016 – present** **Chartered Financial Analyst, CFA Institute**
Level II Candidate in the CFA Program. Passed the June 2017 Level I exam.
- Oct. 2009 – Sept. 2015** **University of Barcelona, Dept. of Fundamental Physics**
Ph.D. in History of Quantum Physics. GPA: Excellent
- Sept. 2011 – June 2012** **Autonomous University of Barcelona**
B.Sc. in Applied Statistics. Completed one course with excellent marks. Resigned.
- Oct. 2009 – July 2010** **University of Barcelona**
M.Sc. in Astrophysics, Particle Physics and Cosmology. Specialization in Particle Physics and Gravitation. GPA: 9.1/10 (with Honors)
- Sept. 2004 – June 2009** **University of Barcelona**
B.Sc. in Physics. GPA: 3.21/4 (with Honors)

PROGRAMMING SKILLS



Python

- ◇ Good knowledge of language, framework and libraries.
- ◇ Wide use for simulation of physics and hardware.
- ◇ Data management and statistics (LHCb project, CERN).

Java

- ◇ Good knowledge of language and framework.
- ◇ Use for simulation at CLIC project at CERN.
- ◇ Android applications.

Web design

- ◇ Advanced knowledge of HTML5 and CSS3.
- ◇ Knowledge of JavaScript.
- ◇ See examples in:
<http://www.ub.edu/fsica/encontres> 
<http://www.quadrivium.cat/> 

Operating systems

- ◇ Excellent knowledge of *Linux* and *Windows*.
- ◇ Good knowledge of *Mac*.







Office suite

- ◇ Advanced skills in MS Word and MS Excel (and opensource equivalents).
- ◇ Good knowledge of MS Access.

Other languages and platforms:

- | | |
|------------------|-------------------------|
| » <i>SPSS</i> | » <i>SQL</i> |
| » <i>R</i> | » <i>GRID computing</i> |
| » <i>Fortran</i> | » <i>JIRA</i> |
| » <i>ROOT</i> | » <i>Clarity</i> |
| » <i>Matlab</i> | » <i>IBM Mainframe</i> |
| » <i>C++</i> | |

RELEVANT PUBLICATIONS

- ◇ B. Pié & E. Pérez, The historical role of the Adiabatic Principle in Bohr's quantum theory. (2016) 
- ◇ E. Pérez & B. Pié, Bohr and Ehrenfest: transformations and correspondences in the early 20's. (2016) 
- ◇ B. Pié, L'experiment d'Stern i Gerlach en el seu context històric (PhD thesis). (2015) 
- ◇ B. Pié & E. Pérez, L'àtom d'Schrödinger. (2014) 
- ◇ CERN Yellow Report CERN-2012-03 
- ◇ For a complete list of contributed publications see: https://www.researchgate.net/profile/Blai_Valls 

ONLINE COURSES

- Ongoing* Bitcoin and Cryptocurrency Technologies (**Princeton University**)
- Ongoing* Financial Engineering and Risk Management I (**Columbia University**)
- Aug. 2016* Financial Markets (**Yale University**)
- April 2016* Corporate Finance Essentials (**IESE**)
- Dec. 2015* Strategic Business Analytics (**ESSEC & Accenture**)
- April 2014* Programming Applications for Android (**Univ. of Maryland**)
- Nov. 2013* Writing in the Sciences (**Stanford University**)
- April 2013* Introduction to Computer Networks (**Univ. of Washington**)
- June 2012* Cryptography I (**Stanford University**)
- Dec. 2008* Writing techniques (**Univ. of Barcelona, IL3**)

AWARDS AND HONORS

- Feb. 2014* Voted *Best Presentation* in JIPI 2014 conference (Barcelona, Spain)
- Jan. 2010* Awarded the *Extraordinary Bachelor Prize* by the University of Barcelona
- Jul. 2008* CERN Summer Student
- April 2004* *CIRIT Prize to foster science among youth*, Generalitat de Catalunya
- Oct. 2004* Honor Mention in the *XV Spanish National Physics Olympiad (Vigo, Spain)*

LANGUAGES

- Catalan and Spanish**
Native
- English**
TOEFL 112/120
- German**
B1
- French**
A2
- Norwegian**
A1

OTHER INTERESTS

- ◇ Press
- ◇ Writing
- ◇ Open Water Diver
- ◇ Water-polo
- ◇ Argentinian tango