



Part A. PERSONAL INFORMATION		CV date		16/03/2020
First and Family name	Roberto Pittau			
Social Security,		Ago		
Passport, ID number		Age		
Researcher codes	WoS Researcher ID (*)	E-7953	3-2016	
	SCOPUS Author ID(*)			
	Open Researcher and Contributor ID (ORCID) **	0000-0	0000-0003-1365-2959	

(*) At least one of these is mandatory

(**) Mandatory

A.1. Current position

Name of University/Institution	University of	Granada		
Department	Dpto. de Física Teórica y del Cosmos			
Address and Country	Facultad de Ciencias, E-18071 Granada			
Phone number	E-mail	<u>pittau@ugr.es</u>		
Current position	Full Professor (Catedrático)	From	06/11/2016	
Key words	High Energy Particle Phenomenology, Precise EW and QCD calculations, Quantum Field Theory			

A.2. Education

PhD	University	Year
PhD in Physics	University of Torino	1993
Graduation in Physics	University of Torino	1988

A.3. JCR articles, h Index, thesis supervised...

Number of sexenios: **5** (last obtained in 2018) Number of PhD thesis supervised in the last 10 years: **4** Total number of publications (in Q1): **80** (65) Total number of publications including proceedings and submitted articles: **121**

Statistics in inSPIRE (Published only): Total number of citations (Inspires, published papers only): **12171** Number of citations/paper: **150.3** h index: **44 (50** including proceedings)

Statistics in WoS: Total number of citations: **5805** Number of citations/year: **193.5** h index: **33**

Part B. CV SUMMARY (max. 3500 characters, including spaces)

I graduated in physics in 1988 and obtained my PhD in theoretical physics in 1993, both at the University of Torino (Italy) under the supervision of G. Passarino. Afterward, I spent abroad several years as a post-doc: at the Lorentz Instituut, Leiden, NL (1993-1994), at Fermilab, Batavia, USA (1994-1995), at the Paul Scherrer Institut, Villigen, CH (1995-1997) and at CERN, Geneva, CH (1997-1999).

From 01/04/1999 to 17/11/2007 I covered a permanent research/professor position at the U. of Torino. During this same period, I also stayed twice as a visiting professor at the theory department of the University of Granada, from 01/11/2004 to 30/09/2005 and from 20/04/2007 to 17/11/2007. Finally, I got a permanent position at the theory department of the U. of Granada, as associate professor (titular), from 17/11/2007 to 05/11/2016, and as full professor (catedrático), from 06/11/2016.



My 30-year long scientific activity has been mostly dedicated to the study of high-energy collisions, with the main motivation of providing the necessary ingredients to match experimental measurements and theoretical predictions. A solid theoretical and technical background, together with a natural capability of foreseeing and inventing -when not available- what is needed at any given time, has often led my scientific work at the cutting edge of Particle Physics. For instance, in 2011 have been awarded, as co-PI, an ERC grant on "Theoretical predictions and analyses of LHC Physics: advancing the precision frontier" (ERC-2011-ADG-20110209: LHCtheory).

In the last 10 years I have directed 7 projects, as PI or co-PI, 2 of them financed by the European Community. In total, I have participated in more that 20 projects as member of the research team and I have supervised 4 PhD theses and 4 post-docs.

I am an author of 80 peer-reviewed papers (65 in the first quartile) and 41 proceedings. In total, I gathered 13112 citation in InSPIRE.

Part C. RELEVANT MERITS

C.1. Publications (including books)

(Selected 10 publications on topics relevant for the proposal in the last 10 years)

1." FCC-ee: The Lepton Collider: Future Circular Collider Conceptual Design Report Vol. 2", FCC Collaboration, Eur.Phys.J.ST 228 (2019) no.2, 261-623. **[70 citations]**

2. "NNLO final-state quark-pair corrections in four dimensions", Ben Page, Roberto Pittau, Eur.Phys.J. C79 (2019) no.4, 361. **[4 citations]**

3. "To d, or not to d: recent developments and comparisons of regularization schemes", C. Gnendiger et al, Eur.Phys.J. C77 (2017) no.7, 471. **[38 citations]**

4. "Two-loop off-shell QCD amplitudes in FDR", Ben Page, Roberto Pittau, JHEP 1511 (2015) 183. **[10 citations]**

5. "Gauge invariance at work in FDR: H-> gamma gamma", Alice M. Donati, Roberto Pittau, JHEP 1304 (2013) 167. **[27 citations]**

6. "Helac-nlo" G. Bevilacqua et al, Comput.Phys.Commun. 184 (2013) 986-997. [260 citations]

7. "A four-dimensional approach to quantum field theories", Roberto Pittau, JHEP 1211 (2012) 151. **[35 citations]**

8. "Four-lepton production at hadron colliders: aMC@NLO predictions with theoretical uncertainties", Rikkert Frederix at al, JHEP 1202 (2012) 099. **[134 citations]**

9. "Scalar and pseudoscalar Higgs production in association with a top–antitop pair", Rikkert Frederix et al, Phys.Lett. B701 (2011) 427-433. **[161 citations]**

10. "Automation of one-loop QCD corrections", Valentin Hirschi at al, JHEP 1105 (2011) 044. **[379 citations]**

C.2. Research projects and grants

(More relevant projects in the last 10 years as PI or co-PI)

1. Title: Cálculos Precisos para la búsqueda de Nueva Física a la Escala del Tev en Grandes Colisionadores y Observatorios de Partículas, FPA2013-47836-C3-1-P,

Participants: 7,

Financed by: Ministerio de Economía y Competitividad,

Budget: 169.400 €,

Duration: 01/2014-12/2017,

Co-PI together with F. del Águila Giménez.

2. Title: LHCTHEORY, Theoretical predictions and analyses of LHC physics: advancing the precision frontier, ERC-2011-ADG-20110209, Participants in UGR: 3,



Financed by: European Commission, 7th Framework Programme ERC-2011-AdG, Budget: 2.049.600 € (165.600 € to UGR), Duration: 04/2012-03/2017, Co-PI together with M. Mangano, S. Frixione and F. Maltoni.

3. Title: HIGGSTOOLS, The Higgs quest-exploring electroweak symmetry breaking at the LHC, FP7-PEOPLE-2012-ITN 316704, Participants (in UGR, IFIC and IFCA): 10, Financed by: European Commission, FP7-PEOPLE, Budget: 3.738.154 € (239.874 € to UGR), Duration: 01/2014-12/2017, PI of the Spanish node.

4. Title: Fenomenología de LHC a 1-lazo, FPA2011-22398, Participants : 7,
Financed by: MICINN,
Budget: 62.920 €,
Duration: 01/01/2012-31/12/2014,
PI of the project.

5. Title: Aspectos de Física del Higgs en el LHC, ACI2009-1045, Participants: 4,
Financed by: Ministerio de Educación y Ciencia,
Budget: 3.500 €,
Duration: 15/12/2009-01/01/2011,
PI of the project.

6. Title: Facilitar Cálculos Automáticos a 1-Lazo con Métodos Numéricos, FPA2008-02984, Participants: 4,
Financed by: Ministerio de Ciencias y Tecnología,
Budget: 57.475 €,
Duration: 01/01/2009-31/12/2011,
PI of the project.

7. Title: Red para el Estudio de la Física de Part culas en los Experimentos del Colisionador LHC del CERN, FPA2008-01699-E, Participants: 8,
Financed by: Ministerio de Ciencia y Tecnología, Budget: 16.000 €,
Duration: 01/01/2008-31/12/2010,
Co-PI of the project.

C.3. Contracts

C.4. Patents

C.5, C.6, C.7... (e.g., Institutional responsibilities, memberships of scientific societies...)

1- Organizer of the Summer School and Workshop on the Standard Model and Beyond, 31/08-12/09/2016, Corfú, Greece.



2- Organizer of the Second Annual Meeting of the ITN Project HiggsTools, 12-15/04/2016, Granada, Spain.

3- Organizer of the Summer School and Workshop on the Standard Model and Beyond, 01-11/09/2015, Corfú, Greece.

4- Organizer of the Summer School and Workshop on the Standard Model and Beyond, 03-14/09/2014, Corfú, Greece.

5- Organizer of the Summer School and Workshop on the Standard Model and Beyond, 31/08-11/09/2013, Corfú, Greece.

6- Organizer of the Summer School and Workshop on the Standard Model and Beyond, 8-17/09/2012, Corfú, Greece.

7- Organizer of the International Workshop on Future Linear Colliders-LCWS11, 26-30/09/2011, Granada, Spain.

8- Convener of the SM and NLO Multileg Working Group en el 7th Les Houches Workshop: Physics at TeV Colliders, 30/05/2011 - 17/06/2011, Les Houches, France.

9- Organizer of the reunión de la Red temática de Física del LHC, 29-30/11/2010, U. of Valencia, Spain.

10- Organizer of the Final meeting of the HEPTOOLS Network, 25-26/11/2010, U. of Granada, Spain.

11- Organizer of the primera reunión de la Red temática de Física del LHC, 28-30/10/2009, U. of Granada, Spain.

12- Convener of the SM and NLO Multileg Working Group del 6th Les Houches Workshop: Physics at TeV Colliders, 8-26/06/2009, Les Houches, France.

13- Organizer of the Final meeting of the European Union Network, 26-27/09/2004, U. of Montpellier, France.

14- Organizer of the Third graduate school in Physics at Colliders, 07/01/2008 - 11/01/2008, U. of Torino, Italy.

15- Organizer of the Second graduate school in Physics at Colliders, 30/06/2003 - 05/07/2003, U. of Torino, Italy.

16- Organizer of the First graduate school in Physics at Colliders, 02/10/2001 - 06/10/2001, U. of Torino, Italy.

17- Chairman of the CERN Workshop on precision calculation for LEP-2 Physics, 1999-2000, CERN, Geneva, Switzerland.

18- Referee of Journal of High Energy Physics, Journal of Physics G, Computer Physics Communications, Physics Letters B.