

Part A. PERSONAL INFORMATION		CV date		3/05/2020	
First and Family name	Juan Antonio Fuster Verdú				
ID number	21635317E	Age	60		
Researcher numbers	Researcher ID				
	Orcid code				

A.1. Current position

University/Institution	Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC)				
Department	Instituto de Física Corpuscular (IFIC)				
Address and Country	Catedrático José Beltrán, 2. E-46980 Paterna				
Phone number	963543492	E-mail	Juan.Fuster@ific.uv.es		
Current position	Profesor de Investigación		From	Jul. 2002.	
Espec. cód. UNESCO	2208.07 & 2212.02				
Palabras clave	Particle Physics, High Energy, Colliders				

A.2. Education

	PhD	University	Year
Licenciado en Ciencias Físicas		Valencia	1982
Tesina de Licenciatura (Sobresaliente)		Valencia	1984
Tesis Doctoral (Premio extraordinario de doctorado-“PhD outstanding Prize”)		Valencia	1987

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

Total “sexenios” awarded: 5

Master Thesis: 7

PhD advised: 13 + 2 on-going; advised/on-going last 5 years: 5/2

Publications, SLAC Spire data base:

- Total publications (10 authors or less): 1.302 (54); last 5 years (2015-2019): 420
- Citations: 146.797 (112,7/article); last 5 years (2015-2019): 30,207 (66,7/article)
- H-index: 165; last 5 years (2015-2020): 87

Projects as PI: 30 national/regional projects (5,7 Meuros) and 7 from EU (2,1 Meuros)

Talks at international conferences/workshops/seminars/colloquia: >70; last 5 years: 21

Organization of international conferences (chair/member organizing committee): >55

Humboldt Research award 2018

Part B. CV SUMMARY

Juan Antonio Fuster Verdú born at Alcoi (Alacant, 1960, Spain); Professor of Research at IFIC-CSIC. He made his PhD thesis at DESY in Hamburg (1983-1987) in the experiment CELLO. He participated in the construction of a new stereo wire chamber and performed searches for New Physics: excited quarks, charged Higgs and planar events with two jets and two muons back to back. In 1987 he defended his PhD. In 1988 he stayed at Valencia and joined the HEP group in DELPHI working in the Time of Flight project.

During 1989-1996 he stayed at CERN as Fellow and later as Staff. He participated in the DELPHI experiment where he worked in the trigger system, the Time of Flight (TOF) and data analysis. He became responsible of the trigger operation system, project leader of the TOF and run coordinator for the operation of DELPHI. In the analysis front he joined the QCD analysis group, where he became convener and later promoted to DELPHI physics coordinator. His particular interest was the study of final state topologies including gluon jets. He studied the gluon and b-quark jet properties, the strong coupling constant, its universality and performed the first measurement of the running b-quark mass.

In 1996 he went to IFIC where he started and led a group to work on micro-strip silicon detectors for the first time in Spain. The group became member of the ATLAS Collaboration and participated in the construction of the ATLAS Semiconductor Tracker (SCT). The group successfully built 15% of the forward modules of this sub-detector. The ATLAS detector discovered the Higgs boson in 2012. Presently he advises 2 PhD students on top-quark physics within ATLAS. Several publications have been derived from these works, including ATLAS results with the most precise measurement of the top-quark pole mass.

In 2005 he started working in the design studies of the future Linear Collider, the ILC (International Linear Collider) and later also joined CLIC efforts. He has been involved in the physics performance and tracking studies of the detectors in the forward region. Member of the DEPFET Collaboration to develop pixel detectors for the Linear Collider. In 2006 he was the first coordinator of the Spanish network for the Linear Collider. Presently he advises 1 PhD in the area of pixel detectors for Linear Colliders and studies on top physics.

As scientific policy manager he was IFIC vice-director of IFIC (2000-2003) and later director of IFIC (2003-2007); manager of the Spanish National Program for Particle Physics (2007-2010) and Coordinator of the Area of Physics and Physics Technologies of CSIC (2010-2012); he recently was vice-director of IFIC for Technology and Innovation (2017-2019). He chaired the ILC contribution to the European Strategy Update (2018-2020). He has been responsible for various experimental tasks and physics working groups (DELPHI, ATLAS, Linear Collider) including technical developments and physics studies. He is and has served at several international scientific and advisory committees (CERN, DESY, IFAE, CSIC, IBS-Korea, *Premios Sabadell...*). He served as member of the C11 Commission for Particle and Fields of IUPAP (International Union of Pure and Applied Physics) since 2011 and became its chair (2014-2017). He is now chair of the European Linear Collider study for physics and detectors as nominated by ECFA and is the Institutional Delegate of CSIC at the Valencia Community. He has taught at the University of Valencia and Schools of Physics. He is very active in dissemination and outreach. He is member of many conference committees and chaired the ICHEP 2014 (the largest HEP conference) for the first time in Spain. He

C.1. Representative publications for this application

- The ATLAS Collab., *Determination of the top-quark pole mass using $t\bar{t}+1$ -jet events collected with the ATLAS experiment in 7 TeV pp collisions*, JHEP 10 (2015) 121; 91 cit.;
- J. Fuster et al., *Extracting the top-quark running mass using $t\bar{t}+1$ -jet events produced at the Large Hadron Collider*, Eur.Phys.J. C77 (2017) no.11, 794; 22 citations.
- The ATLAS Collab., *Measurement of the top-quark pole mass in $t\bar{t}+1$ -jet events collected with the ATLAS experiment in collisions at 8 TeV*, JHEP 11 (2019) 150; 19 citations;
- CLICdp Collab., *Top-quark physics at the CLIC electron-positron collider*, JHEP 11 (2019) 003, 51 citations;
- Ph. Bambade et al., *The International Linear Collider: A global project*, arXiv 1903.01629
- M. Boronat et al., *Top quark mass measurement in radiative events at electron-positron colliders*, Phys.Lett.B 804 (2020) 135353, 3 cit.;
- The ILD Collab., *The ILD detector at ILC*, arXiv 1912.04601, 4 citations.

C.2. Organization of Conferences-Workshop –Seminars Org. (year 2016-2019)

- ECFA Linear Collider Workshop 2016, Santander, Spain, 30(May)-5(June), co-chair;
- ICHEP 2016, Chicago, USA, 2-9 July 2016;
- LCWS 2016, Morioka, Japan, 5-9 December 2016;
- American Linear Collider Workshop (ALWC) 2017, Stanford, USA, 26-30 June 2017;
- Lepton-Photon 2017, Guangzhou, China, 7-12 August, 2017;
- LCWS 2017, Strasbourg, France, 23-27 October 2017;
- Asian Linear Collider Workshop (ALWC) 2018, Fukuoka, Japan, 28 (May)-2 (June);
- LCWS 2018, Arlington, USA, 22-26 October 2018;
- Linear Collider Community Meeting, Lausanne. Switzerland, 8-9 April 2019
- LCWS 2019, Sendai Japan, 28 Oct. – 1 Nov 2019