

Curriculum vitae

Name: Avelino Vicente Montesinos

Date: February 12th, 2013

Last name: Vicente Montesinos

Spanish ID: 45796205P

First name: Avelino

Date of birth: March 19th, 1983

Gender: Male

Current professional status

Institution: Laboratoire de Physique Théorique d'Orsay - Université Paris-Sud XI / CNRS

Address: Université de Paris-Sud XI, Bâtiment 210
91405 Orsay cedex, France

Position: Postdoctoral contract

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Speciality (UNESCO code): 2290, 2212

Research interests

Phenomenology of neutrino mass models. Supersymmetry and physics beyond the Standard Model.
CP and lepton flavor violation.

Education

Title	Institution	Date
Bachelor in Physics	Physics faculty. University of Valencia	July 2006
Master in Physics	Physics faculty. University of Valencia	July 2007
PhD in Physics	Physics faculty. University of Valencia	March 2011

Previous academic positions

Institution: Instituto de Física Corpuscular (IFIC) - CSIC / U. Valencia
City: Valencia Country: Spain From: January 1st, 2007 To: October 31st, 2010
Type: Predoctoral fellowship
PhD under the supervision of Prof. Jose W. F. Valle and Prof. Martin Hirsch

Institution: CERN
City: Geneva Country: Switzerland From: November 1st, 2010 To: January 31st, 2011
Type: Marie Curie ESR Fellowship
Responsible Investigator: Dr. Filipe Joaquim
Subject: CP violation in the leptonic sector

Institution: Institute for Theoretical Physics and Astrophysics. Universität Würzburg
City: Würzburg Country: Germany From: February 15th, 2011 To: September 30th, 2011
Type: Postdoctoral contract

Short research stays

Institution: Institute for the Physics and Mathematics of the Universe, University of Tokyo
City: Kashiwa Country: Japan Date: March 1st, 2009 Duration: 4 months
Type: Predoctoral
Responsible Investigator: Prof. Hitoshi Murayama
Subject: CP violating effects in late neutrino mass models

Institution: Centro de Física Teórica de Partículas, Instituto Superior Técnico, Universidade Técnica de Lisboa
City: Lisbon Country: Portugal Date: March 1st, 2010 Duration: 3 months
Type: Predoctoral
Responsible Investigator: Prof. Jorge Romao
Subject: Lepton flavor violation in SUSY left-right symmetric models

Other academic fellowships

Fellowship	Institution	Dates
Introduction to research fellowship. 4th year students.	CSIC	July 2005
Collaboration grant	Theoretical Physics Department. University of Valencia	Sept 2005 – June 2006
Introduction to research fellowship. 5th year students.	CSIC	Sept – Dec 2006

Publications

Authors: M. Hirsch, W. Porod, A. Vicente

Title: Spontaneous R-parity violation: Lightest neutralino decays and neutrino mixing angles at future colliders

Journal: Physical Review D 77 (2008) 075005

Date: April 2008

Authors: M. Hirsch, J. Meyer, W. Porod, A. Vicente

Title: Majoron emission in muon and tau decays revisited

Journal: Physical Review D 79 (2009) 055023

Date: March 2009

Authors: A. Bartl, M. Hirsch, S. Liebler, W. Porod, A. Vicente

Title: LHC phenomenology of the $\mu\mu\mu$ SSM

Journal: JHEP 05 (2009) 120

Date: May 2009

Authors: J. N. Esteves, M. Hirsch, W. Porod, J. C. Romao, F. Staub, A. Vicente

Title: LHC and lepton flavour violation phenomenology of a left-right extension of the MSSM

Journal: JHEP 1012 (2010) 077

Date: December 2010

Authors: J. N. Esteves, M. Hirsch, W. Porod, J. C. Romao, F. Staub, A. Vicente

Title: Dark matter and LHC phenomenology in a left-right supersymmetric model

Journal: JHEP 1201 (2012) 095

Date: January 2012

Authors: M. Hirsch, F. Staub, A. Vicente

Title: Enhancing $l_i \rightarrow 3l_j$ with the Z_0 -penguin

Journal: Physical Review D 85 (2012) 113013

Date: June 2012

Authors: H.K. Dreiner, K. Nickel, F. Staub, A. Vicente

Title: New bounds on trilinear R-parity violation from lepton flavor violating observables

Journal: Physical Review D 86 (2012) 015003

Date: July 2012

Authors: H.K. Dreiner, W. Porod, F. Staub, A. Vicente

Title: General MSSM signatures at the LHC with and without R-parity

Journal: Physical Review D 86 (2012) 035021

Date: August 2012

Authors: A. Abada, D. Das, A. Vicente, C. Weiland

Title: Enhancing lepton flavour violation in the supersymmetric inverse seesaw beyond the dipole contribution

Journal: JHEP 1209 (2012) 015

Date: September 2012

Authors: M. Hirsch, F. R. Joaquim, A. Vicente

Title: Constrained SUSY seesaws with a 125 GeV Higgs

Journal: JHEP 1211 (2012) 105

Date: November 2012

Authors: E. Peinado, A. Vicente

Title: Neutrino masses from R-parity violation with a Z_3 symmetry
Journal: Physical Review D 86 (2012) 093024
Date: November 2012

Authors: S. Morisi, E. Peinado, A. Vicente
Title: Flavor origin of R-parity
Preprint: arXiv:1212.4145 [hep-ph]
Date: December 2012

Authors: F. Bazzocchi, S. Morisi, E. Peinado, J.W.F. Valle, A. Vicente
Title: Bilinear R-parity violation with flavor symmetry
Journal: JHEP 1301 (2013) 033
Date: January 2013

Authors: H.K. Dreiner, F. Staub, A. Vicente
Title: General NMSSM signatures at the LHC
Journal: Physical Review D 87 (2013) 035009
Date: February 2013

Authors: A. Abada, D. Das, A. M. Teixeira, A. Vicente, C. Weiland
Title: Tree-level lepton universality violation in the presence of sterile neutrinos: impact for RK and $R_{\mu\mu}$
Journal: JHEP 1302 (2013) 048
Date: February 2013

Talks at conferences and workshops

Author: A. Vicente
Title: Neutralino decays in Spontaneous R-Parity Violation
Conference: Planck 2008
Place: Barcelona, Spain
Date: May 19th-23rd, 2008

Author: A. Vicente
Title: Spontaneous R-parity violation and the origin of neutrino masses
Conference: Discrete 08
Place: Valencia, Spain
Date: December 11th-16th, 2008
Publication: J.Phys.Conf.Ser. 171 (2009) 012073.

Author: A. Vicente
Title: Lepton flavor violation in R-parity violating SUSY
Conference: Kick-off Workshop on "Neutrino masses and Lepton flavor violation at the LHC"
Place: Würzburg, Germany
Date: November 24th-25th, 2009

Author: A. Vicente
Title: Lepton flavor violation in SUSY left-right symmetric theories
Conference: Pascos 2010
Place: Valencia, Spain
Date: July 19th-23rd, 2010
Publication: J.Phys.Conf.Ser. 259 (2010) 012065.

Author: A. Vicente
Title: Lepton flavor violation in SUSY left-right symmetric theories
Conference: SUSY 10
Place: Bonn, Germany
Date: August 23rd-28th, 2010

Author: A. Vicente

Title: Supersymmetric Left-Right models and low energy phenomenology
Conference: Planck 2011
Place: Lisbon, Portugal
Date: May 30th-June 3rd, 2011

Author: A. Vicente
Title: Supersymmetric Left-Right models and low energy phenomenology
Conference: 2nd Linear Collider Forum Meeting
Place: Munich, Germany
Date: July 14th-15th, 2011

Author: A. Vicente
Title: Lepton flavour violation and dark matter in a SUSY Left-Right model
Conference: 5th Annual Workshop of the Helmholtz Alliance "Physics at the Terascale"
Place: Bonn, Germany
Date: December 7th-9th, 2011

Author: A. Vicente
Title: Enhancing lepton flavor violation with the Z-penguin
Conference: Invisibles ITN pre-meeting
Place: Madrid, Spain
Date: March 29th-30th, 2012

Author: A. Vicente
Title: Enhancing lepton flavor violation with the Z-penguin
Conference: GDR Terascale 2012 - Clermont-Ferrand meeting
Place: Clermont-Ferrand, France
Date: April 23rd-25th, 2012

Author: A. Vicente
Title: Enhancing lepton flavor violation with the Z-penguin
Conference: XL International Meeting on Fundamental Physics - Flavour miniworkshop
Place: Benasque, Spain
Date: May 24th-June 3rd, 2012

Author: A. Vicente
Title: Enhancing lepton flavor violation with the Z-penguin
Conference: Flasy12
Place: Dortmund, Germany
Date: June 30th-July 4th, 2012
Publication: Proceedings of FLASY12, arXiv:1210.6239

Author: A. Vicente
Title: Light sterile neutrinos and R_K
Conference: GDR Terascale 2012 - Paris meeting
Place: Paris, France
Date: November 5th-7th, 2012

Author: A. Vicente
Title: Bilinear R-parity violation with flavor symmetry
Conference: IVICFA Meeting - Theoretical Physics
Place: Valencia, Spain
Date: November 16th, 2012

Author: A. Vicente
Title: Light sterile neutrinos and R_K
Conference: Discrete 2012
Place: Lisbon, Portugal
Date: December 3th-7th, 2012

Posters at conferences and workshops

Author: A. Vicente

Title: Neutrino masses in R-parity violating SUSY

Conference: SLAC Summer Institute 2009

Place: SLAC, Menlo Park, California, USA

Date: August 3rd-14th, 2009

Author: A. Vicente

Title: Dark matter in a SUSY left-right theory

Conference: TAUP 2011

Place: Munich, Germany

Date: September 5th-9th, 2011

Publication: J.Phys.Conf.Ser. 375 (2012) 012042.

Awarded with the **Hamamatsu prize** for the best poster in the "Dark matter" section.

Seminars

Authors: A. Vicente

Title: Neutrino masses in R-parity violating supersymmetry

Institution: IPMU, University of Tokyo

Place: Kashiwa, Japan

Date: May 20th, 2009

Authors: A. Vicente

Title: Neutrino masses in R-parity violating supersymmetry

Institution: CFTP, IST, Universidade Técnica de Lisboa

Place: Lisbon, Portugal

Date: May 11th, 2010

Authors: A. Vicente

Title: Enhancing lepton flavor violation with the Z-penguin

Institution: Institut für Theoretische Physik, Westfälische Wilhelms-Universität Münster

Place: Münster, Germany

Date: October 15th, 2012

Authors: A. Vicente

Title: Supersymmetric seesaw models after the Higgs discovery

Institution: Laboratoire de Physique Théorique (LPT), CNRS - U. Paris Sud

Place: Orsay, France

Date: October 18th, 2012

Experience in the organization of schools or meetings

Title: ISAPP2008 Valencia "Probing the Universe with neutrinos"

Contribution: Scientific Secretary

Date: July 16th-26th, 2008

Title: PASCOS 2010 16th International Symposium on Particles, Strings and Cosmology
Contribution: Scientific Secretary
Date: July 19th-23rd, 2010

Other merits or skills

- Bachelor and Master in the speciality of “Theoretical Physics”.
- Member of the outreach group “Terapia de Física”, with several talks given at schools.
- Languages: Native in Spanish. Advanced level in English and Intermediate in Portuguese.
- Computing: Good working knowledge in Windows and Linux operating systems. Programming experience in Fortran 77, Fortran 90, LaTeX, html and php. Good skills in Mathematica.
- Participant in several schools on my field of research: Pre-SUSY 07 (Karlsruhe, Germany), ISAPP08 (Valencia, Spain) and SLAC Summer Institute 09 (Stanford, US).