

Curriculum Vitae

Xavier Garcia i Tormo

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Professional data

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Present position: Postdoc

Academic information

- Ph.D. in Physics. University de Barcelona. 2006.
- Diploma d'Estudis Avançats-D.E.A. (Master) on Theoretical Physics. University of Barcelona. 2003.
- Physics degree. University of Barcelona. 2001.
- Higher secondary education. Súñion I.C.C. (Barcelona). 1993-1997.
- Primary school education. Sagrada Família school (Barcelona). 1982-1993.

Languages

English: Fluent. 260/300 TOEFL points (2003). First Certificate (1998).

Catalan and Spanish: Mother tongues.

Attendance to schools and conferences

- “School on Flavor Physics”, Benasque, Spain, 2008.
- “7th Christmas Meeting on Theoretical Physics at the Universitat de Barcelona”, Barcelona, Spain, 2007.
- “International Workshop on Heavy Quarkonium 2007 (QWG5)”, Hamburg, Germany, 2007.
- “6th Christmas Meeting on Theoretical Physics at the Universitat de Barcelona”, Barcelona, Spain, 2006.
- “Heavy quarkonium and related heavy quark states”, Villazzano, Italy, 2006.

- “IRGAC 2006”, Barcelona, Spain, 2006.
- “SCET workshop 2006”, Tucson, Arizona, USA, 2006.
- “Effective Field Theory, QCD, and Heavy Hadrons”, INT-05-1 program. University of Washington, Seattle, USA (from May 29 to June 11, 2005).
- “Euridice 2005 Collaboration Meeting”. Frascati, Italy, 2005.
- “Quark Confinement and the Hadron Spectrum VI”. Sardegna, Italy, 2004.
- “RTN Winter School on Strings, Supergravity and Gauge Fields”. Barcelona, Spain, 2004.
- “Taller de Altas Energías”. Granada, Spain, 2003.
- “41 Internationale Universitäwochen für Theoretische Physik”. Schladming, Austria, 2003.
- “Applications of Effective Field Theories”. Milano, Italy, 2003.
- “Taller de Altas Energías”. Peñíscola, Spain, 2002.

Publications

G. T. Bodwin, X. Garcia i Tormo and J. Lee, “Factorization theorems for exclusive heavy-quarkonium production” Phys. Rev. Lett. **101** (2008) 102002 [arXiv:0805.3876 [hep-ph]].

N. Brambilla, X. Garcia i Tormo, J. Soto and A. Vairo, “Extraction of α_s from radiative $\Upsilon(1S)$ decays” Phys. Rev. D **75** (2007) 074014 [arXiv:hep-ph/0702079].

N. Brambilla, X. Garcia i Tormo, J. Soto and A. Vairo, “The logarithmic contribution to the QCD static energy at N⁴LO” Phys. Lett. B **647** (2007) 185 [arXiv:hep-ph/0610143].

X. Garcia i Tormo and J. Soto, “Radiative decays and the nature of heavy quarkonia” Phys. Rev. Lett. **96** (2006) 111801 [arXiv:hep-ph/0511167].

X. Garcia i Tormo and J. Soto, “Semi-inclusive radiative decays of $\Upsilon(1S)$ ” Phys. Rev. D **72** (2005) 054014 [arXiv:hep-ph/0507107].

X. Garcia i Tormo and J. Soto, “Soft, collinear and non-relativistic modes in radiative decays of very heavy quarkonium” Phys. Rev. D **69** (2004) 114006 [arXiv:hep-ph/0401233].

Contributions to proceedings and preprints

X. Garcia i Tormo and J. Soto, “Inclusive radiative decays of charmonium” arXiv:hep-ph/0701030 (contribution to the BESIII Physics Book).

X. Garcia i Tormo, “Octet contributions in radiative Υ decays” AIP Conf. Proc. **756** (2005) 354 [arXiv:hep-ph/0410052].

Conference talks

“The QCD static potential: ultrasoft effects” in the “7th Christmas Meeting”, University of Barcelona (2007).

“ α_s extraction from radiative quarkonium decays” in the QWG5 meeting (invited plenary talk).

“Extracting α_s from radiative heavy quarkonium decays” in the “6th Christmas Meeting”, University of Barcelona (2006).

“What can we learn from semi-inclusive radiative decays of heavy quarkonium?” in the “Heavy quarkonium and related heavy quark states” workshop.

“Radiative Upsilon decays” in the “Euridice 2005 Collaboration Meeting”.

“Soft, collinear and non-relativistic modes in radiative decays of very heavy quarkonium” in the conference “Quark Confinement and the Hadron Spectrum VI” (invited).

Seminars

“What can we learn from semi-inclusive radiative decays of heavy quarkonium?”. Fermilab (March 2007).

“Radiative Upsilon decays”. Center for Theoretical Physics - MIT (March 2006). University of Kansas (March 2006). Cornell University (February 2006). Argonne National Laboratory (February 2006).

“Understanding the physics of heavy quark bound states from QCD”. Physics Department colloquium. University of Kansas. March 2006.

“Soft, collinear and non-relativistic modes in radiative decays of very heavy quarkonium”. University of Milano. April 2004.

Other activities

Tutor at the “School on Flavor Physics” (Banasque, 2008).

Short stays

Center for Theoretical Physics. Massachusetts Institute of Technology. January 15, 2006-March 15, 2006.

Teaching experience

Teaching of the courses “Mathematical Analysis I” (academic years 2003-2004 and 2004-2005) and “Classical Electrodynamics” (2005-2006) of the Physics degree. University of Barcelona.

Private lessons of Mathematics, Physics and Chemistry to secondary school students. 1997 to 2002.

Awards

FI fellowship from the Generalitat de Catalunya (Catalan government), 2002-2005.

BE travel fellowship from the Generalitat de Catalunya, 2006.

Others

Spanish driving license.

U.S. (Illinois) driving license

ADV-ACUC diving license.

OWD-ACUC diving license.

Hobbies

Reading, swimming and scuba diving.