

Curriculum Vitae

Last name : Muñoz Camacho
First name : Carlos
Date and place of birth : August 19, 1978 in Seville (Spain)
Address : IJCLab, 15 rue Georges Clémenceau, 91400 Orsay (France)
Phone : +33-169155112
E-mail : carlos.munoz@ijclab.in2p3.fr

My recent research activities have primarily focused on exclusive reactions aimed at constraining Generalized Parton Distributions, providing a three-dimensional description of the nucleon structure. This program has been carried out in Halls A and C at Jefferson Lab.

On the instrumentation side, I have devoted significant efforts to the design, construction, and upgrade of electromagnetic calorimeters based on lead fluoride and lead tungstate crystals. In parallel, I have initiated R&D activities for the future Electron-Ion Collider, with a focus on high resolution calorimetry. These efforts are complemented by a strong involvement in EIC physics studies and detector design activities.

1 Professional experience

2022–Present : Senior staff scientist at the French Center for Scientific Research (C.N.R.S.)
2007–2022 : Junior staff scientist at the French Center for Scientific Research (C.N.R.S.)
2006–2007 : Postdoctoral Research Associate at Los Alamos National Laboratory

2 Education

2002–2005 : PhD at the University of Paris 6 and CEA-Saclay
Dissertation : Deeply Virtual Compton Scattering at Jefferson Lab
2001–2002 : Master Degree in High Energy Physics (Orsay, France).
1999–2001 : École Normale Supérieure d'Ulm (Paris, France)
1996–1999 : University of Seville (Spain)

3 Awards

- **C.N.R.S. Bronze Medal** (2010).
- **2006 CEBAF Thesis Prize**.

4 Teaching

- **Introduction to Computing**, 1st year undergraduate.
- **Laboratory Assistant**, Master level.
- **Advanced Mathematics**, École Centrale de Paris.
- **Semi-conductor physics**, École Supérieure d'Électricité.
- **Computer Programming**, University of Paris 13, Orsay.

5 Mentorship

- Supervision of 7 graduate students
- Supervision of 3 postdoctorant associates
- Nine undergraduate students.

6 Outreach

- Chair of the Nuclear Physics Division of the French Physical Society, 2016–2020.
- High school lecturer.
- Judge at the INTEL International Science and Engineering Fair.
- Judge at the Menaul High School Science Fair.

7 Selected publications

(> 150 in peer-reviewed journals)

- F. Georges et al., *Phys. Rev. Lett.* **128**, 252002 (2022).
- M. Dlamini et al., *Phys. Rev. Lett.* **127**, 152301 (2021).
- M. Benali et al., *Nature Physics* **16**, 191–198 (2020).
- T. Horn et al., *Nucl. Instrum. Meth.* **A956**, 163375 (2020)
- M. Duer et al., *Nature* **560**, 617–621 (2018).
- M. Defurne et al., *Nature Communications* **8**, 1408 (2017).
- M. Mazouz et al., *Phys. Rev. Lett.* **118**, 222002 (2017).
- M. Defurne et al., *Phys. Rev. Lett.* **117**, 262001 (2016).
- M. Defurne et al., *Phys. Rev. C92*, 055202 (2015).
- O. Hen et al., *Science* **346** (2014) 614–617.
- I. Pomerantz et al., *Phys. Rev. Lett.* **110**, 242301 (2013).
- I. Bedlinskiy et al., *Phys. Rev. Lett.* **109**, 112001 (2012).
- E. Fuchey et al., *Phys. Rev. C83*, 025201 (2011).
- C. Muñoz Camacho, *AIP Conf. Proc.* **1056**, 380 (2008).
- C. Muñoz Camacho et al., *RIKEN Accel. Prog. Rep.* **41**, 157 (2008).
- A. Adare et al., *Phys. Rev. Lett.* **101**, 162301 (2008).
- M. Mazouz et al., *Phys. Rev. Lett.* **99**, 242501 (2007).
- M. Iodice et al., *Phys. Rev. Lett.* **99**, 052501 (2007).
- C. Muñoz Camacho et al., *Phys. Rev. Lett.* **97**, 262002 (2006).

8 Scientific responsibilities

- Spokesperson of experiments E07-007, E12-06-114 and E12-13-010 at Jefferson Lab.
- Spokesperson of future experiment E12-20-012 at Jefferson Lab 12 GeV.
- Director of the GDR QCD (2021–2025).
- Principal Investigator of the research contract 283493 between Brookhaven National Lab and the C.N.R.S. (Calorimetry R&D for the Electron-Ion Collider).
- Chair of the Hall A Jefferson Lab Collaboration (2016–2018)
- Chair of the 'Jefferson Lab Users Organization' (2022–2023)
- Associate editor of the *European Physical Journal A* (EPJ A).
- Convener of the *Physics Working Group* of the *EIC Yellow Report*.
- Convener of the *Physics Working Group* of (*ECCE detector proposal*, EIC).
- Member of the steering committee of the WG03 : 'exercice de prospective nationale 2020–2030'.
- Member of the "CLAS Speakers Committee" in Hall B at JLab (2014–2020).
- Member of the Scientific Council of the Joliot-Curie International School.
- Member of the "Hadron Physics WG" of the NUPECC 'Long Range Plan'.
- Member of the *EIC Institutional Board*
- Member of the *EIC Conference and Talks Committee* (2018–2020).
- Organizer of the *EIC Users Group Meeting*, Paris 2019.
- Organizer of the 2018 Joliot-Curie School.