

This document certifies the involvement and participation of **Dr. Pablo Martinez Ruiz del Arbol** as a postdoctoral researcher in the **research projects** detailed below for which I acted as the responsible and principal investigator (PI).



27.8. 2015

Project Name: Measurements of Higgs boson properties and Searches for Supersymmetry with CMS

Start/End: 01.04.2014 – 31.03.2016

Funding agency: Swiss National Science Foundation

Principal Investigator: Prof. Dr. Rainer Wallny

Institution: Swiss Federal Institute of Technology Zurich (ETH Zurich)

Main activities by Dr. Martinez:

- Leading and conducting a search for Supersymmetry in events with two opposite sign leptons, jets and transverse momentum imbalance at a center of mass energy of 8 TeV, collected by the CMS experiment.
- Leading and conducting a novel technique for estimating the energy corrections associated to b-jets in the CMS experiment.
- Co-convenor of the SUSY Trigger, Monte Carlo and Interpretations group. In charge of developing a successful and coherent trigger and Monte Carlo strategy for the SUSY group of CMS.

Project Name: Search for New Physics and Measurements of Higgs boson properties with CMS

Start/End: 01.04.2013 – 31.03.2014

Funding agency: Swiss National Science Foundation

Principal Investigator: Prof. Dr. Rainer Wallny

Institution: Swiss Federal Institute of Technology Zurich (ETH Zurich)

Main activities by Dr. Martinez:

- Leading and conducting a search for Supersymmetry in events with two opposite sign leptons, jets and transverse momentum imbalance at a center of mass energy of 8 TeV, collected by the CMS experiment.
- Leading and conducting a novel technique for estimating the energy corrections associated to b-jets in the CMS experiment.
- Collaborating in the supervision of PhD. Student Marco-Andrea Buchmann.
- Supervision of Master student Pascal Jordi
- Trigger contact of the SUSY group within the Trigger Studies Group of CMS.

Project Name: High pT physics with CMS and upgrades of the tracker pixel detector

Start/End: 01.04.2011 – 31.03.2013

Funding agency: Swiss National Science Foundation

Principal Investigator: Prof. Dr. Rainer Wallny

Institution: Swiss Federal Institute of Technology Zurich (ETH Zurich)

Main activities by Dr. Martinez:

- Leading and conducting a search for Supersymmetry in events with two opposite sign leptons, jets and transverse momentum imbalance at a center of mass energy of 7 TeV, collected by the CMS experiment.
- Collaborating in the supervision of PhD Student Marco-Andrea Buchmann.
- Trigger contact of the SUSY group within the Trigger Studies Group of CMS.