



Pablo Martinez Ruiz del Arbol &lt;pablo.martinez.ruizdelarbol@gmail.com&gt;

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**[CINCO] [DM2016] Pablo Martinez Ruiz Del Arbol (ETH Zürich) accepted invitation to give a talk at DM2016**

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**[CINCO] Cms INformation on COnferences** <cms-conf-cinco@cern.ch>

Tue, Apr 26, 2016 at 10:46 AM

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Dear Committee,

Pablo Martinez Ruiz Del Arbol (ETH Zürich) [mailto:[Pablo.Martinez@cern.ch](mailto:Pablo.Martinez@cern.ch)] just accepted to give a talk "Review of Supersymmetry Searches at 13 TeV with the CMS experiment"

[https://cms-mgt-conferences.web.cern.ch/cms-mgt-conferences/conferences/pres\\_display.aspx?cid=1853&pid=13535](https://cms-mgt-conferences.web.cern.ch/cms-mgt-conferences/conferences/pres_display.aspx?cid=1853&pid=13535)

at "DM2016: Dark Matter 2016: From the smallest to the largest scales, 27 Jun-1 Jul 2016, Santander (Spain)"  
[https://cms-mgt-conferences.web.cern.ch/cms-mgt-conferences/conferences/conf\\_display.aspx?cid=1853](https://cms-mgt-conferences.web.cern.ch/cms-mgt-conferences/conferences/conf_display.aspx?cid=1853)



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Geneva, 07.01.2010

Votre référence / Your reference :

Notre référence / Our reference : CMS-Z.G

**Certificate of Presence**

We hereby certify that Pablo Martínez Ruiz del Árbol, member of the CMS Collaboration, has given the following oral presentations at conferences, workshops, and seminars on the dates and places indicated below:

"Precision Timing with the CMS MIP Timing Detector" at "LP2019: 29th International Symposium on Lepton Photon Interactions at High Energies, 5-10 Aug 2019, University of Toronto, Toronto (Canada)".

"Dark matter at LHC" at "Split2018: 2018 LHC days in Split, 17-22 Sep 2018, University of Split - FESB and Faculty of Science, Split (Croatia)".

"Searches for BSM physics in the 2 leptons y MET final state" at "IX CPAN days: IX CPAN days, Centro Nacional de Partículas, Astropartículas y Nuclear, 23-25 Oct 2017, CPAN, Santander (Spain)".

"Review of Supersymmetry Searches at 13 TeV with the CMS experiment" at "DM2016: Dark Matter 2016: From the smallest to the largest scales, 27 Jun-1 Jul 2016, Santander (Spain)".

"CMS SUSY searches at 13 TeV" at "LPCC Seminar: CERN LPCC EP-LHC Seminar Series, 9 Feb 2016, Geneva (Switzerland)".

"Search for Beyond the Standard Model Physics in multi-leptonic and photonic final states with the CMS detector" at "ICHEP 2014: 37th International Conference on High Energy Physics, 2-9 Jul 2014, Valencia (Spain)".

"Searches for SUSY in events with two or more leptons at CMS" at "ICHEP 2012: International Conference on High Energy Physics, 4-12 Jul 2012, Melbourne, VIC (Australia)".

"Susy searches in the Z+Jets+MET final state in 7 TeV pp collisions with the jet-z balance method" at "Bienal RSEF: XXXIII Reunión Bienal de la Real Sociedad Española de Física, 19-23 Sep 2011, Universidad de Cantabria, Santander (Spain)".

"Commissioning and Performance of the CMS Detector" at "Blois2010: 22nd Rencontres de Blois on "Particle Physics and Cosmology; First Results from the LHC", 15-20 Jul 2010, Blois (France)".

"The CMS Muon System Alignment: First results from commissioning runs " at "BIENALFISICA09: XXXII Bienal de Física, 7-11 Sep 2009, Ciudad Real (Spain)".

"Muon Alignment in ATLAS and CMS" at "Detector Understanding with First LHC Data, 29 Jun-3 Jul 2009, DESY, Hamburg (Germany)".

"The CMS Muon System Alignment" at "CHEP09: International Conference On Computing In High Energy Physics And Nuclear Physics, 21-27 Mar 2009, Prague (Czech Republic)".

  
CMS Secretariat



## Review of Supersymmetry Searches at 13 TeV with the CMS experiment

Plenary given at [DM2016: Dark Matter 2016: From the smallest to the largest scales, 27 Jun-1 Jul 2016, Santander \(Spain\)](#). The talk is selected (cms speaker).

### Abstract

The CMS experiment has designed an ambitious program of Supersymmetry searches using the data collected at 13 TeV during the year 2015. Most of these searches focus in the production of gluino or squark pairs undertaking long decay chains finalizing with the production of the lightest neutralino which is assumed to be stable conforming an excellent candidate for Dark Matter. Different analysis have been conducted in a broad collection of final states and the experimental results have been interpreted in the context of Simplified Models of Supersymmetry, scanning over the masses of the gluino/squarks and the lightest neutralino. Mass upper limits have been largely extended with respect to 8 TeV data. Special attention is dedicated to the di-lepton opposite sign analysis where CMS and ATLAS reported excesses at 8 TeV (CMS and ATLAS) and 13 TeV (only ATLAS).

### Speakers

[Pablo Martinez Ruiz Del Arbol \(ETH Zürich\)](#)

### Files

● [CMSDarkMatter.pdf \(6313.7 kB\)](#) [Final draft approved by Claudio Campagnari] ✕

### Bibliography

**Note:** PAG and POG related abstracts require bibliography of relevant PAS notes, CMS notes and possibly journal references. Click Update Bibliography link from Presentations menu to add references.

### Content Review

The content of this talk is related to the activities of one or more CMS groups listed below. The conveners or conference committee representatives of these groups have enhanced CINCO administrative rights. They will be informed by e-mail about any changes and updates to the presentation title, abstract or file upload.

● CMS: SUSY

### Instructions

You are allowed to modify this presentation. You can download and upload any file. This talk was originally created by Pablo Martinez Ruiz Del Arbol on 4/14/2016.