

Carlotta Favaro

Apéro du SPP
24.01.2014

where I come from



Canaletto, view of Canal Grande

my early studies: University of Padova



- bachelor with thesis on applied physics at Laboratori Nazionali di Legnaro (LNL)
- master in particle and astroparticle physics
 - thesis: study of properties of B mesons at CMS, under supervision of F. Simonetto and T. Dorigo

my Ph.D. at Universität Zürich

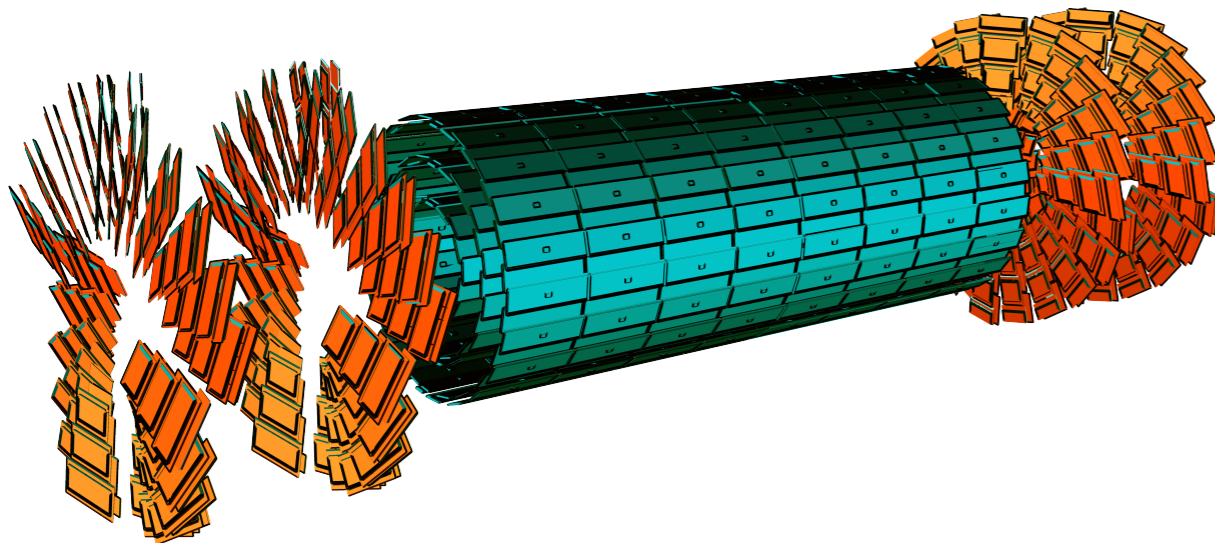


- under the supervision of V. Chiochia and S. De Visscher (C. Amsler group), with CMS
- based at CERN



my Ph.D. at Universität Zürich

- commissioning and upgrade of the CMS pixel detector
- identification of heavy hadron decays
- study of the associated production of Z^0 bosons and heavy hadrons (b)



arXiv:1310.1349v2 [hep-ex] 13 Dec 2013

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH (CERN)



CERN-PH-EP/2013-153
2013/12/17

CMS-EWK-11-015

Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at $\sqrt{s} = 7$ TeV

The CMS Collaboration*

Abstract

A study of proton-proton collisions in which two b hadrons are produced in association with a Z boson is reported. The collisions were recorded at a centre-of-mass energy of 7 TeV with the CMS detector at the LHC, for an integrated luminosity of 5.2 fb^{-1} . The b hadrons are identified by means of displaced secondary vertices, without the use of reconstructed jets, permitting the study of b-hadron pair production at small angular separation. Differential cross sections are presented as a function of the angular separation of the b hadrons and the Z boson. In addition, inclusive measurements are presented. For both the inclusive and differential studies, different ranges of Z boson momentum are considered, and each measurement is compared to the predictions from different event generators at leading-order and next-to-leading-order accuracy.

Published in the Journal of High Energy Physics as doi:10.1007/JHEP12(2013)039.

and from December 2013...



- first postdoc at CEA under supervision of Fabrice Couderc, with Martina Machet, CMS group
- study of the properties of the resonance discovered in 2012, in the diphoton final state
- analysis of data collected in first LHC run and preparation for 2015.

my free time

