

Jelena Mijušković | Curriculum Vitae

EDUCATION

PhD in Particle Physics

University Paris-Saclay and University of Montenegro

November 2018 – June 2022

Thesis title: Measurement of the N-jettiness variables in the production of Z boson events with the CMS detector and performance of its electromagnetic calorimeter

MSc in Particle Physics

University of Montenegro

October 2017 – October 2018

Thesis title: Emission of $\mu^+\mu^-$ pairs in pp interactions at the energy of 5 TeV at CMS experiment

Specialist degree in Physics

University of Montenegro

September 2015 – October 2016

Thesis title: Efficiency of detection ^{134}Cs by gamma detector pairs at the angles of 90° and 180°

Bachelor degree in Physics

University of Montenegro

September 2012 – September 2015

WORK EXPERIENCE

Trainee researcher

CMS Collaboration

June 2017 – ongoing

- Included in projects as a member of CMS group of University of Montenegro and University Paris-Saclay

Lecturer at International Masterclass - hands on particle physics

Ministry of Science Montenegro

March 2017, 2018, 2019, 2021

- Lectures about particle physics and detector systems for high school students
- Exercises on measurements of real data from particle physics experiments at CERN: CMS (2017), ATLAS (2018), ALICE (2019) and particle therapy (2021)

Asistent at Open Science Days Montenegro

Ministry of Science Montenegro

September 2015 and October 2017

Physics teacher

High school "Stojan Cerović", Niksic, Montenegro

January 2017 – October 2017

DIGITAL SKILLS

- Programming Language – Python, C++
- ROOT
- GIT Hub
- Working with CMS Offline Software CMSSW

LANGUAGE

- **Montenegrin** [native]
- **English** [fluent]
- **Italian** [independent user]
- **French** [basic user]

CONFERENCES AND WORKSHOPS

LHCP2022: 10th Annual Large Hadron Collider Physics Conference

Virtual (Taiwan)

May 2022

Talk: V+jet measurements on behalf of the CMS, ATLAS and LHCb collaboration

SM@LHC2022: Standard Model at the LHC 2022

CERN, Geneva (Switzerland)

April 2022

Talk: Associated production of vector bosons with light jets on behalf of the CMS, ATLAS and LHCb collaboration

Resummation, Evolution, Factorization Workshop 2021

Virtual (DESY)

November 2021

DPF2021: Meeting of the Division of Particles and Fields of the American Physical Society

Virtual (Florida State University)

July 2021

Talk: The CMS Electromagnetic Calorimeter calibration and performance during LHC Run 2

iWoRiD2021: 22nd International Workshop on Radiation Imaging Detectors

Virtual (Ghent University)

July 2021

Poster: High-rate readout with precise time and energy resolution: the case of the CMS Electromagnetic calorimeter upgrade

PyHEP 2020 Workshop

Virtual

July 2020

CMS Z(+jets) Run II analysis workshop (II)

Virtual (DESY)

July 2020

Talk: Status of N-jettiness analysis at CMS

CMS Z(+jets) Run II analysis workshop

Brussels, Belgium

January 2020

New Trends in High-Energy Physics

Odessa, Ukraine

May 2019

CMS Data Analysis School Pisa 2019

Pisa, Italy

January 2019

SCHOLARSHIPS

- International Doctoral Action Program (ADI 2018) of the IDEX Université Paris-Saclay
- Scholarship for doctoral research in Montenegro from Ministry of Science Montenegro
- City of Nikšić scholarship for academic achievement

PUBLICATIONS

Coauthor on CMS papers since 2019 (87 CMS papers), the full list can be consulted at:
<https://inspirehep.net/authors/1712994>

The papers I personally contributed to:

- CMS Collaboration, "Measurement of differential cross sections for the production of a Z boson in association with jets in proton-proton collisions at $\sqrt{s} = 13$ TeV", CMS-SMP-19-009, submitted to PRD, *arXiv:2205.02872*
- CMS Collaboration, "Measurement of the mass dependence of the transverse momentum of lepton pairs in Drell-Yan production in proton-proton collisions at $\sqrt{s} = 13$ TeV", CMS-SMP-20-003, submitted to EPJC, *arXiv:2205.04897*
- CMS Collaboration, "Azimuthal correlations in Z+jets at 13 TeV", CMS-PAS-SMP-21-003
- "Measurement of the N-jettiness variables in events with a Z boson produced in proton-proton collisions at $\sqrt{s} = 13$ TeV", CMS internal note SMP-22-002

Conferences with published proceedings

- Jelena Mijuskovic on behalf of CMS collaboration, "The CMS electromagnetic calorimeter upgrade: high-rate readout with precise time and energy resolution", JINST 2022 17 C01004, doi:10.1088/1748-0221/17/01/c01004.