

# Pernié Luca

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## CAREER & EDUCATION

### POSTDOCTORAL FELLOW

Texas A&M University  
2015-present

### PH.D. IN HIGH ENERGY PHYSICS

Université Libre de Bruxelles  
Università di Roma La Sapienza  
2011-2015

### M.PHIL. IN PARTICLE PHYSICS

Università di Roma La Sapienza  
2006-2011

## SKILLS

### COMPUTING:

Phyton • C • C++ • Bash •  $\text{\LaTeX}$  •  
Git • SVN

### LIBRARIES:

Keras • Theano • numpy • SciPy •  
pandas

### LANGUAGES:

Italian • English • Spanish •  
French (basic)

### INTERPERSONAL SKILLS:

Leadership • Management •  
Working under pressure •  
Event Planning • Effective  
Communication • Public Speaking

## INTERESTS

Experimental High Energy Physics  
Deep Learning  
Software Engineering  
Science Education

## AWARDS

Distinguished Postdoctoral Flash talk  
(Texas A&M)  
One year grant as CERN-INFN  
associate (fellow position at CERN)  
Best group presentation at CMSSDAS  
(Hamburg, Germany)

## EXPERIENCE

### PHYSICS ANALYSIS

#### POSTDOCTORAL FELLOW

Coordinator of the Heavy Higgs analysis  $Hhh \rightarrow WWbb \rightarrow ll\nu\nu bb$   
Contact person for the search for new light bosons in the 4 muons final  
state

#### PH.D.

Measurement of the Z boson pair-production cross section in  
proton-proton collisions at 7 and 8 TeV, and ECAL timing studies for the  
phase-2 upgrade of the CMS experiment

### DETECTOR CONDITIONS

#### POSTDOCTORAL FELLOW

Representative of the Track-Based Muon alignment at the Muon Detector  
Performance Group Office (DPGO) L2 convener in the Alignment,  
Calibration and Databases group (Alca/DB)

#### PH.D.

Intercalibration constant

## RESPONSIBILITIES

- Manager of the CMS Physics Performance Detector group in  
Alca/DB (Alignment Calibration and Database)
- Data Manager for the CERN Tier2
- Muon Alignment responsible in the CMS DPGO (Detector  
Performance Group Office)
- Organizer of the spring High Energy Physics Experiment Cosmology  
(HEPEC) seminars at Texas A&M University
- Organizer of the workshop: Machine Learning in Science