

# WELCOME TO PPC 2019

XIII<sup>th</sup> International Workshop on the Interconnection  
between Particle Physics and Cosmology

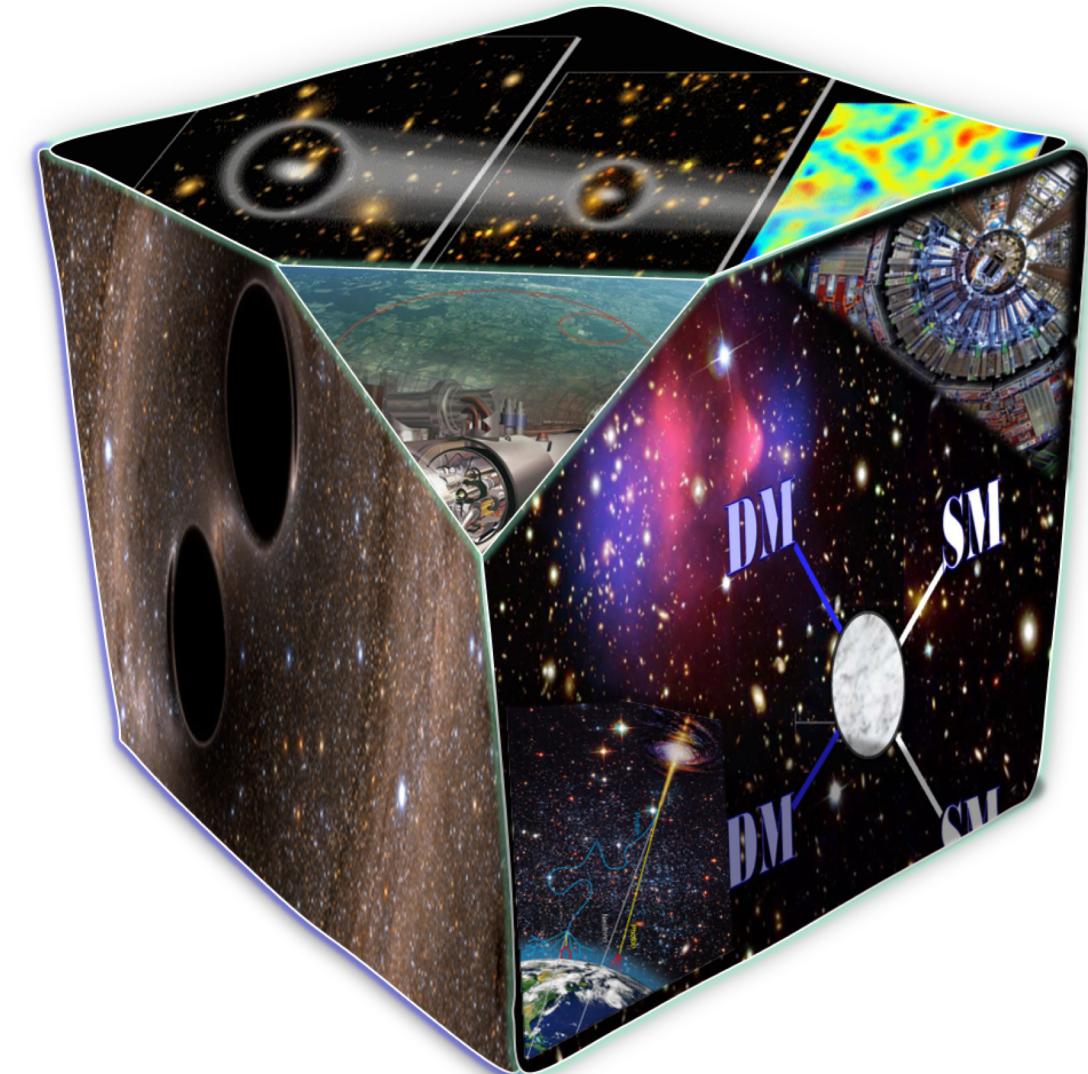
July 22 – 26, 2019, Cartagena, Colombia

<https://fisindico.uniandes.edu.co/indico/conferenceDisplay.py?ovw=True&confId=78>

Organizing institutions:



UNIVERSIDAD  
DE ANTIOQUIA



# MOST RECENT PPC WORKSHOPS:

## PPC 2018

ETH, Zurich, Switzerland

<https://ppc2018.ethz.ch/>

## PPC 2017

Texas A&M University, Corpus Christi, Texas, USA

<http://sci.tamucc.edu/events/ppc/index.html>

## PPC 2016

ICTP-SAIFR / IFT-UNESP, Sao Paulo, Brazil

[http://www.ictp-saifr.org/?page\\_id=9358](http://www.ictp-saifr.org/?page_id=9358)

## PPC 2015

Center for Theoretical Underground Physics and Related Areas (CETUP\*),  
Deadwood, South Dakota, USA

<http://research.dsu.edu/ppc/default.aspx>

## PPC 2014

University of Guanajuato, Leon, Mexico

<http://fisica.ugto.mx/~events/ppc14/>

## PPC 2013

Center for Theoretical Underground Physics and Related Areas (CETUP\*),  
Deadwood, South Dakota, USA

<https://research.dsu.edu/ppc/2013/>

## PPC 2012

Institute of Advanced Studies (KIAS) Seoul, South Korea

<http://workshop.kias.re.kr/PPC2012/>

## PPC 2011

European Organization for Nuclear Research (CERN) Geneva, Switzerland

<https://indico.cern.ch/event/116616/>

## PPC 2010

National University of Torino, Italy

<http://www.ppc10.to.infn.it/>

# COLOMBIA IS THE SEVENTH COUNTRY HOSTING THE PPC WORKSHOP!





## FEW WORDS ABOUT COLOMBIA:

- Continental area = 1'141.748 km<sup>2</sup> (~3 times area of Germany).
- Colombia has a very diverse geography: coasts in pacific and atlantic oceans, Andean mountains, Amazon area, Eastern planes.
- One of the top countries worldwide with the most biodiversity /km<sup>2</sup>
- Population = ~48 million people
- Main products: Coffee, Flowers, banana, emeralds.
- Main cities: Bogota, Cali, Medellin, Barranquilla, Cartagena.
- High Energy Physics in Colombia has been rapidly growing during the las decade.

# COLOMBIA : Land of Coffee

<https://www.youtube.com/watch?v=sT8fsQg5tyk>



# COLOMBIA : Land of Flowers.

<https://www.youtube.com/watch?v=VGiJSBRHBV4>



# COLOMBIA : Land of Birds

[https://www.youtube.com/watch?time\\_continue=141&v=T-jn1\\_thxK8](https://www.youtube.com/watch?time_continue=141&v=T-jn1_thxK8)

Acorn Woodpecker



Antpitta



Aracaris



Parrots and Macaws



Paradise Tanager



Pygmy Owl

Sword-billed Hummingbird



potoo



# CARTAGENA

- Founded in 1533.
- First Spanish colony on the American continent.
- A key port for exporting gold to Spain.
- Castillo San Felipe was built to protect the city against Pirates.
- Cartagena was one of the first territories in America of freed African slaves.
- The most touristic city in Colombia : ~ 4 million tourists in 2018.



# A Few words about the PPC2019 organizing institutions:



Universidad de  
los Andes

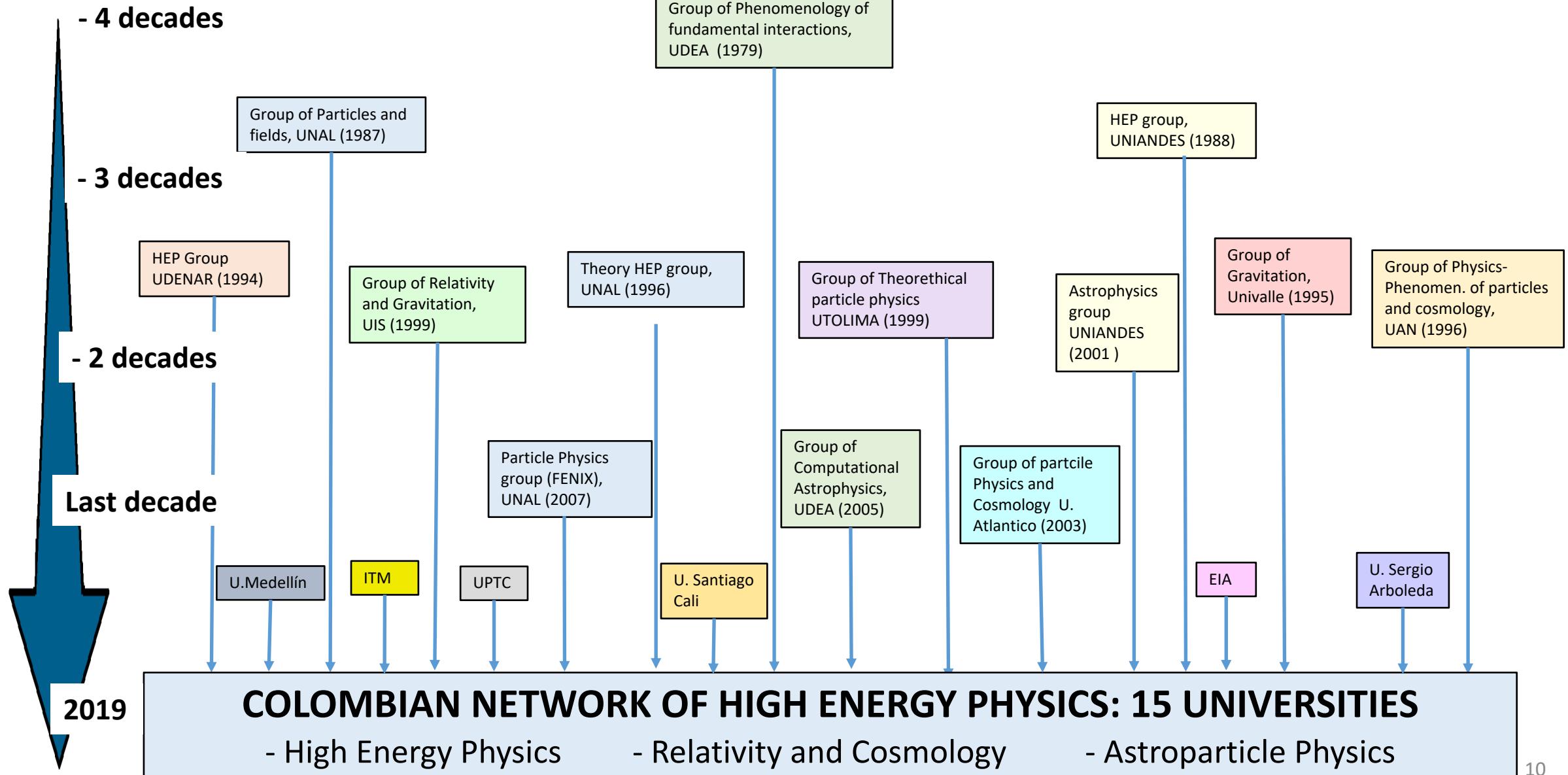
- Private university founded in 1948
- Main Campus in Bogotá.
- About 15000 undergraduate , 3500 Master students and 400 PhD students.
- 43 undergraduate programs
- 73 Master programs
- 16 PhD Programs
- Undergraduate physics program: ~40 years old.
- PhD physics Program: ~20 years old.
- Exp. High Energy Physics Group ~30 years old (E710 adn D0 experiments at Fermilab, CMS at LHC).



UNIVERSIDAD  
DE ANTIOQUIA

- Public university founded in 1803
- Main Campus in Medellín.
- About 37000 undergraduate, 2400 Master students, 600 PhD students.
- 194 undergraduate programs
- 77 Master programs
- 26 PhD programs
- Undergraduate physics program: ~50 years old.
- PhD physics Program: ~30 years old.
- Phenomenology of fundamental interactions group ~40 years old: Model building to explain results of particle physics labs. It joined the CMS collaboration in 2017.

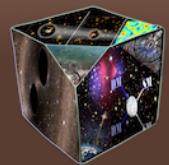
# High Energy Physics in Colombia



# COLLABORATION WITH HEP EXPERIMENTS

- **CMS** : UNIANDES, U. ANTIOQUIA
- **ATLAS**: UAN
- **LHCb**: UNAL
- **ALICE**: UIS
- **DUNE**: UAN, U. ATLANTICO, U. SERGIO ARBOLEDA
- **NOVA**: U. ATLANTICO
- **PIERRE AUGER**: UIS, U. MEDELLIN

# RECENT HEP EVENTS IN COLOMBIA



PPC2019:  
XIII International Workshop on Interconnections  
between Particle Physics and Cosmology

22-26 July 2019 Uniandes Campus at Cartagena de Indias  
America/Bogota timezone



MOCa 2019: Materia Oscura en Colombia

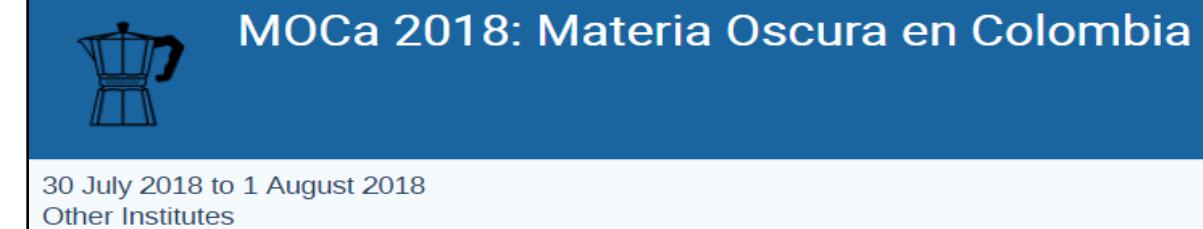
30 September 2019 to 2 October 2019  
Other Institutes  
America/Bogota timezone



International Workshop on Next generation Nucleon Decay and Neutrino Detectors (NNN19)



4th ComHEP: Colombian Meeting on High Energy Physics (Barranquilla, Colombia)



30 July 2018 to 1 August 2018  
Other Institutes



PIC2018: XXXVIII International Symposium on Physics in Collision, Bogota, Colombia

Second UK-Latin America Workshop on DAQ and Data Selection

13-14 November 2018  
Bogota, Colombia  
America/Bogota timezone



3-7 December 2018  
Santiago de Cali, Colombia

3rd ComHEP:  
Colombian  
Meeting on High  
Energy Physics  
(Cali, Colombia)

# PPC 2019

## Thanks to:

- 1) The speakers for accepting our invitation.
- 2) The International Advisory Committee
- 3) The local organizing committee
- 4) The organizing institutions for all the help with the logistics
- 5) All Participants

# PPC 2019

## SOME ANNOUNCEMENTS

- **SOCIAL EVENTS:** Welcome cocktail on monday. Workshop dinner on Thursday.
- **STAMP ON SPEAKER PASSPORTS (PIP5, PIP6):** We need a photo of the stamp.
- **TOURIST PRECAUTIONS:**
  - Please avoid to wonder around by yourself very late at night
  - avoid locals to give you massages on the beach or to buy something without consulting the price first.
  - Be cautious when displaying expensive cell-phones, cameras or laptops on the streets at any time.
  - Please avoid drinking tap water.
- **CONTACT TELEPHONE NUMBERS:**

Alejandra Isaza: Cell-phone: (57) 315 813 8971

Andrés Flórez: Cell-phone: (57) 310 765 1585

Carlos Avila: Cell-phone: (57) 311 264 326

# **Wi-Fi Access on the university campus**

The wireless network of the university, named SENECA is available and visible in the whole campus. You can connect to it using any browser and login in with the following information:

**Username (cuenta): EventosUandes**

**Password (clave): EvUniandinos.18**

**LET'S BEGIN !**