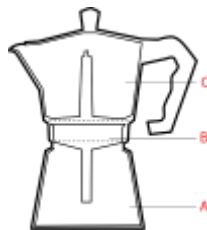


## **Session Program**

**7-8 Oct 2020**



**MOCa 2o2o: Materia Oscura en Colombia**

***MOCa***

# Wednesday 7 October

09:00

## MOCa Session

09:00–09:10 **Welcome**

09:10–09:35

### **Some phenomenological consequences of neutrino emission from primordial black holes**

#### **Speaker**

Yuber Perez

09:35–10:00

### **Sterile Neutrino Dark Matter via Secret Neutrino Interactions**

#### **Speaker**

Walter Tangarife

10:00–10:25

### **DDDD**

#### **Speaker**

Prof. Diego Restrepo

10:25

10:45

## MOCa Session

10:45–11:10

### **The Z5 model of two-component dark matter**

#### **Speaker**

Oscar Zapata

11:10–11:35

### **Neutron star constraints on dark matter**

#### **Speaker**

RAGHUVeer GARANI RAMESH

11:35–12:00

### **Bound States and dark matter**

#### **Speaker**

Dr Camilo Garcia Cely

12:00

14:00

## MOCa Session

14:00–14:25

### **Majoron Dark Matter and Neutrino Masses In The Type 1 Seesaw Mechanism**

#### **Speaker**

Gustavo Ardila

14:25–14:50

### **Flavored axions and the flavor problem**

#### **Speaker**

Eduardo Rojas

15:15

14:50-15:15

## **Dynamical Symmetry Breaking and Fermion Mass Hierarchy in the Scale-Invariant 3-3-1 Model**

**Speaker**

Bruce Sanchez-Vega

15:35

## **MOCa**

**Session**

15:35-16:00

## **Axions and Cosmic Strings**

**Speaker**

Nicolas Fernandez

16:00-16:25

## **Chiral Gravitational Waves and Primordial Black Holes in Axion Inflation**

**Speaker**

Juan Pablo Beltran

16:25-16:50

## **Boosting Freeze-in through Thermalization**

**Speaker**

Nicolás Bernal

16:50

# Thursday 8 October

09:00

## MOCa

### Session

09:00–09:25

#### **The SENSEI Experiment: An Ultrasensitive Search for Sub-GeV Dark Matter**

##### **Speaker**

Mariano Cababie

09:25–09:50

#### **Unimodular Gravity and diffusion processes in the dark sector: a possible solution to the $H_0$ tension**

##### **Speaker**

Francisco Xavier Linares Cedeño

09:50–10:15

#### **Polar ring structures in simulations of minor mergers of galaxies.**

##### **Speaker**

Prof. Juan Carlos Muñoz Cuartas

10:15

10:35

## MOCa

### Session

10:35–11:00

#### **Non-particle dark matter from Hubble parameter**

##### **Speaker**

Nikodem Poplawski

11:00–11:25

#### **Probing Compressed Higgsino Models via Vector Boson Fusion Processes at the LHC**

##### **Speaker**

Ms Nathalia Cardona Cañaveral

11:25–11:35

#### **Conclusions**

12:00