

# Triggering Discoveries in High Energy Physics II



## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Opening address

Contribution ID: 2

Type: **not specified**

# Welcome

*Monday 29 January 2018 14:00 (30 minutes)*

**Presenter:** FERNANDEZ TELLEZ, Arturo (Autonomous University of Puebla (MX))

**Session Classification:** Opening session

Contribution ID: 3

Type: **not specified**

## Introduction to LHC physics

*Monday 29 January 2018 14:30 (50 minutes)*

**Presenter:** EVANS, David (University of Birmingham (GB))

**Session Classification:** Opening session

Contribution ID: 4

Type: **not specified**

## Introduction to triggering

*Monday 29 January 2018 15:40 (50 minutes)*

**Presenter:** LIETAVA, Roman (University of Birmingham (GB))

**Session Classification:** Opening session

Contribution ID: 5

Type: **not specified**

## Introduction to LHC detectors

**Session Classification:** Opening session

Contribution ID: 6

Type: **not specified**

## ALICE physics overview

*Tuesday 30 January 2018 09:00 (45 minutes)*

**Presenter:** CUAUTLE FLORES, Eleazar (Universidad Nacional Autonoma (MX))

**Session Classification:** Physics motivation, trigger and results

Contribution ID: 7

Type: **not specified**

## Overview of ATLAS results and prospects for physics at the HL-LHC

*Tuesday 30 January 2018 09:45 (45 minutes)*

**Presenter:** GORINI, Edoardo (INFN Lecce e Universita del Salento (IT))

**Session Classification:** Physics motivation, trigger and results



Contribution ID: 8

Type: **not specified**

## Physics overview from CMS

*Tuesday 30 January 2018 10:50 (45 minutes)*

**Presenter:** SRIMANOBHAS, Phat (Chulalongkorn University (TH))

**Session Classification:** Physics motivation, trigger and results

Contribution ID: 9

Type: **not specified**

## LHCb physics overview

*Tuesday 30 January 2018 11:35 (45 minutes)*

**Presenter:** VAGNONI, Vincenzo (CERN and INFN Bologna)

**Session Classification:** Physics motivation, trigger and results

Contribution ID: **10**

Type: **not specified**

## Overview of NA62 Physics

**Presenter:** ANZIVINO, Giuseppina (Universita e INFN, Perugia (IT))

**Session Classification:** Physics motivation, trigger and results

Contribution ID: 11

Type: **not specified**

## Pierre Auger Observatory

*Tuesday 30 January 2018 16:00 (45 minutes)*

**Presenters:** NELLEN, Lukas (Universidad Nacional Autonoma (MX)); NELLEN, Lukas (I. DE CIENCIAS NUCLEARES, UNAM)

**Session Classification:** Physics motivation, trigger and results

Contribution ID: 12

Type: **not specified**

## **The High-Altitude Water Cherenkov gamma ray observatory**

*Monday 29 January 2018 16:30 (45 minutes)*

**Presenter:** AGUILAR, Ibrahim Torres

**Session Classification:** Opening session

Contribution ID: 13

Type: **not specified**

## Extreme Universe Space Observatory (EUSO)

*Tuesday 30 January 2018 16:45 (45 minutes)*

**Presenter:** MEDINA TANCO, Gustavo (Instituto de Ciencias Nucleares - UNAM)

**Session Classification:** Physics motivation, trigger and results

Contribution ID: 14

Type: **not specified**

## CBM overview

*Wednesday 31 January 2018 11:35 (45 minutes)*

**Presenter:** FRIESE, Volker (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Session Classification:** Current trigger systems

Contribution ID: 15

Type: **not specified**

## ALICE trigger in run1/run2

*Wednesday 31 January 2018 09:00 (45 minutes)*

**Presenter:** JUSKO, Anton (University of Birmingham (GB))

**Session Classification:** Current trigger systems



Contribution ID: **16**

Type: **not specified**

## **The ATLAS trigger system**

*Wednesday 31 January 2018 09:45 (45 minutes)*

**Presenter:** OWEN, Rhys Edward (University of Birmingham (GB))

**Session Classification:** Current trigger systems

Contribution ID: 17

Type: **not specified**

## The current CMS trigger

*Wednesday 31 January 2018 10:50 (45 minutes)*

**Presenter:** BORTIGNON, Pierluigi (University of Florida (US))

**Session Classification:** Current trigger systems

Contribution ID: **18**

Type: **not specified**

## ALICE trigger upgrade

*Thursday 1 February 2018 09:45 (45 minutes)*

**Presenter:** PEREZ MORENO, Luis Alberto (Autonomous University of Puebla (MX))

**Session Classification:** Trigger system upgrades

Contribution ID: **19**

Type: **not specified**

## **ATLAS trigger upgrade**

*Thursday 1 February 2018 09:00 (45 minutes)*

**Presenter:** BRACINIK, Juraj (University of Birmingham (GB))

**Session Classification:** Trigger system upgrades

Contribution ID: **20**

Type: **not specified**

## **CMS trigger upgrade**

*Thursday 1 February 2018 10:50 (45 minutes)*

**Presenter:** REKOVIC, Vladimir (University of Wisconsin Madison (US))

**Session Classification:** Trigger system upgrades

Contribution ID: **21**

Type: **not specified**

## **The NA62 trigger system**

*Thursday 1 February 2018 15:45 (45 minutes)*

**Presenter:** SOLDI, Dario (Universita e INFN Torino (IT))

**Session Classification:** Trigger system upgrades

Contribution ID: 22

Type: **not specified**

## LHCb trigger

*Thursday 1 February 2018 11:35 (1 hour)*

**Presenter:** RATNIKOV, Fedor (Yandex School of Data Analysis (RU))

**Session Classification:** Trigger system upgrades

Contribution ID: 23

Type: **not specified**

## Overview of NA62 Physics

*Thursday 1 February 2018 15:00 (45 minutes)*

**Presenter:** ANZIVINO, Giuseppina (Universita e INFN, Perugia (IT))

**Session Classification:** Trigger system upgrades



Contribution ID: 24

Type: **not specified**

## Triggering with displaced muons in CMS

*Thursday 1 February 2018 16:50 (40 minutes)*

**Presenter:** CASTANEDA, Alfredo (Texas A & M University (US))

**Session Classification:** Trigger system upgrades

Contribution ID: 25

Type: **not specified**

## Lepton CP violation in $\nu 2\text{HDM} \times S_3$

*Tuesday 30 January 2018 12:20 (40 minutes)*

In the theoretical framework of Two Higgs Doublet Model type-III plus neutrinos and the horizontal flavor symmetry  $S_3$  ( $\nu 2\text{HDM} \times S_3$ ), we compare the theoretical expressions of the flavor mixing angles with the current experimental data on masses and flavor mixing of leptons, through a chi-squared likelihood test. The results obtained in this chi-squared analysis are in very good agreement with the current experimental data. We also obtained an allowed value ranges for the “Dirac-like” phase factor, as well as for the two Majorana phase factors. Furthermore, we study the phenomenological implications of these numerical values of the CP-violation phases on the neutrinoless double beta decay, and for Long Base-Line neutrino oscillation experiments such as T2K, NOvA and DUNE.

**Presenter:** GONZALEZ, Felix**Session Classification:** Physics motivation, trigger and results

Contribution ID: 26

Type: **not specified**

## Closing

*Thursday 1 February 2018 17:30 (10 minutes)*

**Session Classification:** Trigger system upgrades