

6th RED LHC workshop



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Monday, 9 May 2022 16:30 (5 minutes)

Presenter: FERNANDEZ BARBON, Jose (Unknown)

Session Classification: BSM physics

Contribution ID: 2

Type: **not specified**

Exotic Higgs decays

Monday, 9 May 2022 16:35 (10 minutes)

Presenter: CEPEDA, Maria (CIEMAT)

Session Classification: BSM physics

Contribution ID: 3

Type: **not specified**

Direct & indirect constraints on new physics from l+pTmiss final states

Monday, 9 May 2022 16:51 (10 minutes)

Primary author: DE LA CRUZ, Begona (Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Presenter: DE LA CRUZ, Begona (Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Session Classification: BSM physics

Contribution ID: 4

Type: **not specified**

Z'-explorer: confronting Z' models against LHC data

Monday, 9 May 2022 17:07 (10 minutes)

Primary author: SANDÁ SEOANE, Rosa María (International Center for Advanced Studies)

Presenter: SANDÁ SEOANE, Rosa María (International Center for Advanced Studies)

Session Classification: BSM physics

Contribution ID: 5

Type: **not specified**

BSM 4-top production search in ATLAS

Monday, 9 May 2022 17:23 (10 minutes)

Primary author: ORLANDO, Nicola (Institut de Fisica d'Altes Energies (IFAE))

Presenter: ORLANDO, Nicola (Institut de Fisica d'Altes Energies (IFAE))

Session Classification: BSM physics

Contribution ID: 6

Type: **not specified**

Search for axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s} = 13$ TeV with CMS

Monday, 9 May 2022 17:39 (10 minutes)

Primary author: FERNANDEZ DE TROCONIZ, Jorge (Universidad Autonoma de Madrid (ES))

Presenter: FERNANDEZ DE TROCONIZ, Jorge (Universidad Autonoma de Madrid (ES))

Session Classification: BSM physics

Contribution ID: 7

Type: **not specified**

Search for light neutral scalars en top quark decays in ATLAS

Monday, 9 May 2022 17:55 (10 minutes)

Primary author: RIU, Imma (IFAE Barcelona (ES))

Presenter: RIU, Imma (IFAE Barcelona (ES))

Session Classification: BSM physics

Contribution ID: 8

Type: **not specified**

Roundtable: anomalies

Monday, 9 May 2022 18:40 (1 hour)

Primary authors: JUSTE ROZAS, Aurelio (ICREA and IFAE (ES)); ALVAREZ GONZALEZ, Barbara (Universidad de Oviedo (ES)); HEINEMEYER, Sven (CSIC (Madrid, ES))

Presenters: JUSTE ROZAS, Aurelio (ICREA and IFAE (ES)); ALVAREZ GONZALEZ, Barbara (Universidad de Oviedo (ES)); HEINEMEYER, Sven (CSIC (Madrid, ES))

Session Classification: BSM physics

Contribution ID: 9

Type: **not specified**

Roundtable: dark matter

Tuesday, 10 May 2022 11:45 (1 hour)

Primary author: SCODELLARO, Luca (Instituto de Física de Cantabria)

Presenters: GARCIA NAVARRO, Jose Enrique (Univ. of Valencia and CSIC (ES)); SCODELLARO, Luca (Instituto de Física de Cantabria)

Session Classification: Dark Matter

Contribution ID: **10**

Type: **not specified**

Semi-dark Higgs decays

Tuesday, 10 May 2022 10:00 (10 minutes)

Primary author: NO REDONDO, Jose Miguel (Conseil Europeen Recherche Nucl. (CERN)-Unknown-Unknown)

Presenter: NO REDONDO, Jose Miguel (Conseil Europeen Recherche Nucl. (CERN)-Unknown-Unknown)

Session Classification: Dark Matter

Contribution ID: **11**

Type: **not specified**

When Leptoquarks met Dark Matter

Tuesday, 10 May 2022 10:32 (10 minutes)

Primary author: ZURITA, José Francisco (IFIC - Univ. of Valencia and CSIC (ES))

Presenter: ZURITA, José Francisco (IFIC - Univ. of Valencia and CSIC (ES))

Session Classification: Dark Matter

Contribution ID: 12

Type: **not specified**

Hunting Squarks in Higgsino LSP scenarios at the LHC

Tuesday, 10 May 2022 10:16 (10 minutes)

Presenter: ARGANDA, Ernesto (Instituto de Física Teórica UAM-CSIC)

Session Classification: Dark Matter

Contribution ID: 13

Type: **not specified**

EFT and vector dark matter at the LHC

Tuesday, 10 May 2022 10:48 (10 minutes)

Primary author: DJOUADI, Abdelhak (Universidad de Granada (ES))

Presenter: DJOUADI, Abdelhak (Universidad de Granada (ES))

Session Classification: Dark Matter

Contribution ID: 14

Type: **not specified**

Yet more DM

Session Classification: Dark Matter

Contribution ID: 15

Type: **not specified**

Dark Matter vs SUSY phenomenology in models with Grand Unification

Tuesday, 10 May 2022 11:04 (10 minutes)

Primary author: GOMEZ, Mario E.

Presenter: GOMEZ, Mario E.

Session Classification: Dark Matter

Contribution ID: 16

Type: **not specified**

Constraining Low-Scale Flavor Models with $(g-2)_\mu$ and Lepton Flavor Violation

Wednesday, 11 May 2022 12:07 (10 minutes)

Primary author: VIVES GARCIA, Oscar Manuel (Univ. of Valencia and CSIC (ES))

Presenter: VIVES GARCIA, Oscar Manuel (Univ. of Valencia and CSIC (ES))

Session Classification: Exotics

Contribution ID: 17

Type: **not specified**

Gamma measurements at the LHCb experiment

Tuesday, 10 May 2022 14:46 (10 minutes)

Primary author: BROSSA GONZALO, Arnau (University of Warwick (GB))

Presenter: BROSSA GONZALO, Arnau (University of Warwick (GB))

Session Classification: Flavor / SM physics

Contribution ID: **18**

Type: **not specified**

Radiative B decays

Tuesday, 10 May 2022 15:02 (10 minutes)

Primary author: GIRONELLA GIRONELL, Pere (University of Barcelona (ES))

Presenter: GIRONELLA GIRONELL, Pere (University of Barcelona (ES))

Session Classification: Flavor / SM physics

Contribution ID: **19**

Type: **not specified**

Rare decays at LHCb

Tuesday, 10 May 2022 15:18 (10 minutes)

Primary author: MOMBÄCHER, Titus (Universidade de Santiago de Compostela (ES))

Presenter: MOMBÄCHER, Titus (Universidade de Santiago de Compostela (ES))

Session Classification: Flavor / SM physics

Contribution ID: 20

Type: **not specified**

Rare B Decay Anomalies

Tuesday, 10 May 2022 15:34 (10 minutes)

Primary author: VIRTO, Javier (Universitat de Barcelona)

Presenter: VIRTO, Javier (Universitat de Barcelona)

Session Classification: Flavor / SM physics

Contribution ID: 21

Type: **not specified**

New physics in B meson mixing: future sensitivity and limitations

Tuesday, 10 May 2022 15:50 (10 minutes)

Primary author: VALE SILVA, Luiz

Presenter: VALE SILVA, Luiz

Session Classification: Flavor / SM physics

Contribution ID: 22

Type: **not specified**

Tests of Higgs interactions in WW scattering

Presenter: ESPRIU CLIMENT, Domenec (University of Barcelona (ES))

Session Classification: Flavor / SM physics

Contribution ID: 23

Type: **not specified**

WW scattering

Tuesday, 10 May 2022 17:23 (10 minutes)

Primary author: SANZ-CILLERO, Juan José (Universidad Complutense de Madrid & IPARCOS)

Presenter: SANZ-CILLERO, Juan José (Universidad Complutense de Madrid & IPARCOS)

Session Classification: Flavor / SM physics

Contribution ID: 24

Type: **not specified**

WW scattering at colliders: a window to new Higgs physics

Tuesday, 10 May 2022 17:07 (10 minutes)

Primary author: HERRERO SOLANS, Maria Jose (Universidad Autonoma de Madrid (ES))

Presenter: HERRERO SOLANS, Maria Jose (Universidad Autonoma de Madrid (ES))

Session Classification: Flavor / SM physics

Contribution ID: 25

Type: **not specified**

Measurement of the Higgs couplings to WW

Tuesday, 10 May 2022 17:39 (10 minutes)

Primary author: MORAN, Dermot Anthony (Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Presenter: MORAN, Dermot Anthony (Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Session Classification: Flavor / SM physics

Contribution ID: 26

Type: **not specified**

Top-quark polarisation measurements and EFT bounds in ATLAS

Tuesday, 10 May 2022 16:35 (10 minutes)

Primary author: ESCOBAR IBAÑEZ, Carlos (Instituto de Fisica Corpuscular (IFIC) - CSIC/UV)

Presenter: ESCOBAR IBAÑEZ, Carlos (Instituto de Fisica Corpuscular (IFIC) - CSIC/UV)

Session Classification: Flavor / SM physics

Contribution ID: 27

Type: **not specified**

Probing EFT with top quarks in multilepton final state

Tuesday, 10 May 2022 16:51 (10 minutes)

Primary author: GONZALEZ, Juan (Universidad de Oviedo (ES))

Presenter: GONZALEZ, Juan (Universidad de Oviedo (ES))

Session Classification: Flavor / SM physics

Contribution ID: 28

Type: **not specified**

Roundtable: LLP

Primary authors: VIZAN GARCIA, Jesus Manuel (Universidad de Cantabria and CSIC (ES)); FOLGUERAS, Santiago (Universidad de Oviedo (ES))

Presenters: TORRO PASTOR, Emma (Univ. of Valencia and CSIC (ES)); VIZAN GARCIA, Jesus Manuel (Universidad de Cantabria and CSIC (ES)); FOLGUERAS, Santiago (Universidad de Oviedo (ES))

Session Classification: Exotics

Contribution ID: 29

Type: **not specified**

Searches for axion-like particles using neutrino experiments

Primary author: COLOMA, Pilar (Instituto de Fisica Teorica UAM/CSIC)

Presenter: COLOMA, Pilar (Instituto de Fisica Teorica UAM/CSIC)

Session Classification: Exotics

Contribution ID: 30

Type: **not specified**

The ALPs from the Top: Searching for long lived axion-like particles from exotic top decays

Wednesday, 11 May 2022 11:35 (10 minutes)

Primary author: CARMONA BERMUDEZ, Adrian (Universidad de Granada (ES))

Presenter: CARMONA BERMUDEZ, Adrian (Universidad de Granada (ES))

Session Classification: Exotics

Contribution ID: **31**

Type: **not specified**

Search for magnetic monopoles produced via the Schwinger mechanism

Wednesday, 11 May 2022 12:23 (10 minutes)

Presenter: MITSOU, Vasiliki (Univ. of Valencia and CSIC (ES))

Session Classification: Exotics

Contribution ID: **32**

Type: **not specified**

LLP LHCb

Primary author: VAZQUEZ SIERRA, Carlos (CERN)

Presenter: VAZQUEZ SIERRA, Carlos (CERN)

Session Classification: Exotics

Contribution ID: **33**

Type: **not specified**

LLP LHCb

Wednesday, 11 May 2022 11:51 (10 minutes)

Presenter: SANDERSWOOD, Izaak (Univ. of Valencia and CSIC (ES))

Session Classification: Exotics

Contribution ID: 34

Type: **not specified**

Toy models for hierarchy studies

Wednesday, 11 May 2022 12:39 (10 minutes)

Primary author: CEMBRANOS, Jose A. R. (Universidad Complutense de Madrid)

Presenter: CEMBRANOS, Jose A. R. (Universidad Complutense de Madrid)

Session Classification: Exotics

Contribution ID: 35

Type: **not specified**

Round table: LLP

Wednesday, 11 May 2022 10:00 (1 hour)

Presenters: VIZAN GARCIA, Jesus Manuel (Universidad de Cantabria and CSIC (ES)); FOLGUERAS, Santiago (Universidad de Oviedo (ES)); MITSOU, Vasiliki (Univ. of Valencia and CSIC (ES))

Session Classification: Exotics

Contribution ID: 36

Type: **not specified**

mb at mH: the running bottom quark mass and the Higgs boson

Tuesday, 10 May 2022 14:30 (10 minutes)

Primary author: RODRIGO, German (IFIC CSIC-UV)

Presenter: RODRIGO, German (IFIC CSIC-UV)

Session Classification: Flavor / SM physics