

XV Mexican School of Particles and Fields

Thursday 06 September 2012 - Saturday 15 September 2012

Edificio Carolino, BUAP

Book of Abstracts

Contents

Accelerator Physics	1
Effective potential and its applications	1
ATLAS	1
Neutrino Physics	1
Accelerator Physics	1
Accelerator Physics	1
Effective potential and its applications	1
ATLAS	1
AdS/CFT (String theory and QCD)	1
Effective potential and its applications	1
Accelerator Physics	2
Effective potential and its applications	2
Beyond the Standard Model	2
ALICE experiment	2
Collider Physics	2
Astroparticle Physics	2
Collider Physics	2
Neutrino technology	2
LHC Physics program	2
Collider Physics	3
Astroparticle Physics	3
Collider Physics	3
Neutrino physics experiments	3
Poster session	3

Astroparticle Physics	3
Effective Theories in Flavor Physics and Physics Beyond the SM	3
HAWC	3
Radio Frequency Crabbing System for an Electron-Ion Collider	3
Recent results on SUSY	3
Astroparticle Physics	4
Effective Theories in Flavor Physics and Physics Beyond the SM	4
CMS experiment. Highlights and performance	4
Look into the new Boson properties	4
Effective Theories in Flavor Physics and Physics Beyond the SM	4
Recent results on Higgs	4
CMS experiment. Highlights and performance	4
El descubrimiento de un nuevo bosón en el LHC	4
Effective Theories in Flavor Physics and Physics Beyond the SM	4
Phase structure of the $\lambda\phi^4$ model in the presence of a magnetic field	4
A finite volume gluon dressing function for dynamical quark masses	5
De Sitter vacua in non-geometric compactifications	5
Primordial Magnetic fields and leptogenesis: A toy model	5
The Pierre Auger Observatory	5
The Mesoamerican Institute for Theoretical Physics.	5

0

Accelerator Physics

Prof. STEERENBERG, Rende¹

¹ *BE/OP*

1

Effective potential and its applications

Prof. ESPINOZA, José Ramón¹

¹ *ICREA, Barcelona*

2

ATLAS

3

Neutrino Physics

4

Accelerator Physics

5

Accelerator Physics

6

Effective potential and its applications

7

ATLAS

8

AdS/CFT (String theory and QCD)

Corresponding Author(s): alberto@nucleares.unam.mx

9

Effective potential and its applications

10

Accelerator Physics

11

Effective potential and its applications

12

Beyond the Standard Model

Corresponding Author(s): aplorenz@fis.cinvestav.mx

13

ALICE experiment

Corresponding Author(s): felix@fnal.gov

14

Collider Physics

15

Astroparticle Physics

Corresponding Author(s): andreas.haungs@kit.edu

16

Collider Physics

17

Neutrino technology

Corresponding Author(s): felix@fnal.gov

18

LHC Physics program

19

Collider Physics

20

Astroparticle Physics

Corresponding Author(s): haungs@ik.fzk.de

21

Collider Physics

22

Neutrino physics experiments

Corresponding Author(s): alexis@nucleares.unam.mx

24

Poster session

25

Astroparticle Physics

Corresponding Author(s): andreas.haungs@kit.edu

26

Effective Theories in Flavor Physics and Physics Beyond the SM

27

HAWC

Corresponding Author(s): alberto@inaoep.mx

28

Radio Frequency Crabbing System for an Electron-Ion Collider

Corresponding Author(s): rawkvlt@gmail.com

29

Recent results on SUSY**30****Astroparticle Physics**

Corresponding Author(s): haungs@ik.fzk.de

31**Effective Theories in Flavor Physics and Physics Beyond the SM****32****CMS experiment. Highlights and performance****33****Look into the new Boson properties****34****Effective Theories in Flavor Physics and Physics Beyond the SM****35****Recent results on Higgs****36****CMS experiment. Highlights and performance****37****El descubrimiento de un nuevo bosón en el LHC****51****Effective Theories in Flavor Physics and Physics Beyond the SM**

57**Phase structure of the $\lambda\phi^4$ model in the presence of a magnetic field**

Corresponding Author(s): ana.silveira@correo.nucleares.unam.mx

58**A finite volume gluon dressing function for dynamical quark masses**

Corresponding Author(s): alfredo.raya@umich.mx

59**De Sitter vacua in non-geometric compactifications**

Corresponding Author(s): oloaiza@fisica.ugto.mx

60**Primordial Magnetic fields and leptogenesis: A toy model**

Corresponding Author(s): delepine@fisica.ugto.mx

70**The Pierre Auger Observatory**

Corresponding Author(s): villasen@ifm.umich.mx

73**The Mesoamerican Institute for Theoretical Physics.**Prof. ZEPEDA, Arnulfo¹¹ *Cinvestav*

Corresponding Author(s): zepeda@fis.cinvestav.mx