Editorial

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The XIII Mexican Workshop on Particles and Fields (MWPF) took place from 20-26 October, 2011, in the city of León, Guanajuato, México. This is a biennial meeting organized by the Division of Particles and Fields of the Mexican Physical Society designed to gather specialists in different areas of high energy physics to discuss the latest developments in the field. The thirteenth edition of this meeting was hosted by the Department of Cultural Studies of Guanajuato University in a nice surrounding environment dedicated to the Arts and Culture.

The XIII MWPF was organized by three working groups who organized the corresponding sessions around three topics. The first one was Strings, Cosmology, Astroparticles and Physics Beyond the Standard Model. In this category we included: Cosmic Rays, Gamma Ray Bursts, Physics Beyond the Standard Model (theory and experimental searches), Strings and Cosmology. The working group for this topic was formed by Arnulfo Zepeda, Oscar Loaiza, Axel de la Macorra and Myriam Mondragón. The second topic was Hadronic Matter which included Perturbative QCD, Jets and Diffractive Physics, Hadronic Structure, Soft QCD, Hadron Spectroscopy, Heavy Ion Collisions and Soft Physics at Hadron Colliders, Lattice Results and Instrumentation. The working group for this topic was integrated by Wolfgang Bietenholz and Mariana Kirchbach. The third topic was Electroweak and Flavor Physics in whose classification we had Quark masses and mixing, Electroweak Symmetry Breaking, Heavy Quark Physics, Neutrinos, CP Violation, CKM and Rare Decays. The working group for this topic was formed by David Delepine, Lorenzo Díaz, Gerardo Herrera and Olga Félix Beltrán.
The three topics included invited talks dedicated to review theoretical and experimental aspects of the corresponding topic. We had also plenary topical sessions during the mornings and early afternoons and parallel thematic sessions were held late in the afternoons. The reviews sessions were delivered by invited speakers of international prestige on the corresponding subjects and having an active collaboration with the Mexican scientific community. The plenary topical sessions and parallel thematic sessions were given by active researchers both from abroad and working in México. The program included also a permanent poster session and the organizing committee awarded the best poster - a decision made by the three working groups- with a silver medal.

On Sunday 23th of October we had an excursion to the ancient archeological site of Plazuelas near Penjamo (Guanajuato). Plazuelas is a prehispanic archaeological site located just north of San Juan el Alto, some 2.7 kilometers north of federal highway 90 (Penjamo-Guadalajara), and about 11 kilometers west of the city of Penjamo in the state of Guanajuato, Mexico. The site has been recently open to the public. This site is a very complex city, it was edified following the natural landscape surrounding it. This city was occupied between the 600 and 900 a.C.

After spending some time around this very interesting archaeological site, we went to Hacienda Corralejo, an hacienda where Tequila Corralejo is produced and we had a guided visit of the ”Tequilera” where the famous Corralejo blue bottle of Tequila is done. Hacienda Corralejo is very close to the original Hacienda where Miguel Hidalgo (a Mexican independence hero) was born which now is just a set of foundations and a portal, considered national monuments. There, we enjoyed a delicious meal in the cellars of the Corralejo Hacienda before returning to Leon.

The XIII MWPF was sponsored by several institutions: Consejo Nacional de Ciencia y Tecnología (CONACyT) through the Red Nacional de Física de Altas Energías and individual research projects, Consejo de Ciencia y Tecnológico del Estado de Guanajuato (CONCyTEG), Universidad de Guanajuato, Universidad Nacional Autónoma de México, Universidad de Guanajuato, Centro de Investigaciones de Estudios Avanzados del IPN (CINVESTAV), Universidad Michoacana de San Nicolás de Hidalgo, Benemérita Universidad Autónoma de Puebla and Universidad Autónoma de San Luis Potosí. Also, we wish to thank to those who helped in the process of getting financial support for the meeting, specially Dr. Juan Carlos D’Olivo, President of the Red Nacional de Física de Altas Energías and Dr. José Luis Lucio Martínez, Rector of Universidad de Guanajuato, Campus León. These proceedings have been published thanks to the support of PIFI 2011.

This meeting was possible due to the commitment of the working groups and we wish to thank to their members for the decisive collaboration with the organizing committee. At the local level, we thank our graduate students: Carolina Luján, Vannia González, Selim Gomez and Carlos Alberto Vaquera for their invaluable contribution in the organization of the large amount of little but important things around the meeting.

Finally, we would like to thank all the speakers for delivering excellent talks which contributed to the success of the event. We are also grateful to all the participants for the nice academic and human atmosphere during the meeting and for providing their write-ups on time.

The National organizing committee was formed by

(i) Arnulfo Zepeda (CINVESTAV-DF).
(ii) Guillermo Contreras (CINVESTAV-Mrida).
(iii) David Delepine (DF-UG).
(iv) Axel de la Macorra (IAC/IF-UNAM).
(v) Lorenzo Díaz (BUAP).
(vi) Gerardo Herrera (CINVESTAV-DF).
(vii) Mariana Kirchbach (IF-UASLP).
(viii) Oscar Loaiza (DF-UG).
(ix) Myriam Mondragón (IF-UNAM).
(x) Mauro Napsuciale (DF-UG).
(xi) Humberto Salazar Ibarguen (BUAP).
(xii) Andrés Sandoval (IF-UNAM).
(xiii) Juan Carlos Dolivo (ICN-UNAM).
(xiv) Wolfgang Bietenholz (ICN-UNAM).
(xv) Olga Félix Beltrán (BUAP).
Dinner in cellars of Corralejo Hacienda
Visit at Corralejo Hacienda
XIII Mexican Workshop on Particles and Fields

Thursday 20 October 2011 - Wednesday 26 October 2011

León, Guanajuato

Programme
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## Thursday 20 October 2011

### Revision: Electroweak and Flavor, R1 - Auditorio Jorge Ibargüengoitia (09:00-10:00)
- Conveners: Dr. Díaz, Lorenzo

| time     | [id] title                                    | presenter                  |
|----------|-----------------------------------------------|----------------------------|
| 09:00    | [81] Searches for the higgs boson             | DE LA CRUZ BURELO, Eduard  |

### Revision: Astroparticles, Strings, Cosmology and Beyond the Standard Model, R2 - Auditorio Jorge Ibargüengoitia (10:00-11:00)
- Conveners: Dr. Díaz, Lorenzo

| time     | [id] title                                    | presenter                  |
|----------|-----------------------------------------------|----------------------------|
| 10:00    | [7] The Status of the Dark Matter Paradigm    | Prof. MATOS, Tonatiuh      |

### Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (11:30-13:30)

* Cosmic Rays
* Gamma Ray Bursts
* Beyond the Standard Model (theory and experimental searches)
* Strings
* Cosmology

- Conveners: Dr. Aranda, Alfredo

| time     | [id] title                                    | presenter                  |
|----------|-----------------------------------------------|----------------------------|
| 11:30    | [77] Whish you were here (The Higgs)          | Dr. DIAZ-CRUZ, Lorenzo     |
| 12:00    | [34] Possible texture zeros for mass matrices of the quarks and leptons | Mr. GONZALEZ CANALES, Felix |
| 12:30    | [59] Synthesis of plastic scintillation and applications | Dr. LEÓN MONZÓN, Ildefonso  |
| 13:00    | [78] Ultrahigh Cosmic Rays: The highest energy frontier | Dr. SALAZAR, Humberto      |

### Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (16:00-16:30)

* Cosmic Rays
* Gamma Ray Bursts
* Beyond the Standard Model (theory and experimental searches)
* Strings
* Cosmology

- Conveners: Dr. Sabido, Miguel

| time     | [id] title                                    | presenter                  |
|----------|-----------------------------------------------|----------------------------|
| 16:00    | [69] QM lessons for standard cosmology        | Dr. REYES SANTOS, Marco A. |
### Revision: Astroparticles, String, Cosmology and Beyond the Standard Model, R3 - Auditorio Jorge Ibargüengoitia (16:30-17:30)

| time  | [id] title                                                                 | presenter                           |
|-------|---------------------------------------------------------------------------|-------------------------------------|
| 16:30 | [9] Challenges of string theory: particle physics and cosmology           | Dr. RAMOS-SANCHEZ, Saul             |

### Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (17:30-18:00)

* Cosmic Rays
* Gamma Ray Bursts
* Beyond the Standard Model (theory and experimental searches)
* Strings
* Cosmology

- Conveners: Dr. Sabido, Miguel

| time  | [id] title                                                                 | presenter                           |
|-------|---------------------------------------------------------------------------|-------------------------------------|
| 17:30 | [39] Diffuse supernova neutrino background and scalar field dark matter    | Dr. BARRANCO, Juan                  |

### Poster session + Brindis - Auditorio Jorge Ibargüengoitia (18:00-20:00)
Friday 21 October 2011

**Revision: Hadronic Matter, R4 - Auditorio Jorge Ibargüengoitia (09:00-10:00)**

- Conveners: Dr. Kirchbach, Mariana

| time   | [id]   | title                                                   | presenter       |
|--------|--------|---------------------------------------------------------|-----------------|
| 09:00  | [52]   | ALICE first physics results                             | Dr. HERRERA, Gerardo |

**Revision: Hadronic Matter, R5 - Auditorio Jorge Ibargüengoitia (10:00-11:00)**

- Conveners: Dr. Kirchbach, Mariana

| time   | [id]   | title                                                   | presenter       |
|--------|--------|---------------------------------------------------------|-----------------|
| 10:00  | [35]   | Twenty-First Century Lattice Gauge Theory: Consequences of the QCD Lagrangian | Dr. KRONFELD, Andreas Kronfeld |

**Hadronic Matter - Auditorio Jorge Ibargüengoitia (11:30-13:30)**

*Perturbative QCD, Jets and Diffractive Physics.*

*Hadronic Structure, soft QCD, Spectroscopy.*

*Heavy Ion Collisions and Soft Physics at Hadron Colliders.*

*Lattice Results.*

**Instrumentation.**

- Conveners: Dr. De la Cruz, Eduard

| time   | [id]   | title                                                   | presenter       |
|--------|--------|---------------------------------------------------------|-----------------|
| 11:30  | [3]    | Ultraviolet divergences in classical field equations with noise: the dynamics of the chiral phase transition in QCD | Prof. KREIN, Gastao |
| 12:30  | [15]   | The infrared fixed point of Yang-Mills theories: A renormalization group analysis | Prof. WEBER, Axel |
| 13:00  | [40]   | Heavy quarks in a QCD plasma: energy loss or more baryons than mesons | Dr. CUAUTLE, Eleazar CUAUTLE, Eleazar |

**Hadronic Matter - Auditorio Jorge Ibargüengoitia (16:00-17:30)**

*Perturbative QCD, Jets and Diffractive Physics.*

*Hadronic Structure, soft QCD, Spectroscopy.*

*Heavy Ion Collisions and Soft Physics at Hadron Colliders.*

*Lattice Results.*
**Instrumentation.**

- **Conveners:** Dr. Bietenholz, Wolfgang

| time  | [id] title                                                                 | presenter                           |
|-------|---------------------------------------------------------------------------|-------------------------------------|
| 16:00 | [60] QCD flavour-blindness on the lattice and in the real world           | Dr. RAKOW, Paul                     |
| 17:00 | [64] B hadrons spectroscopy at the D0 experiment in RunII of the Tevatron | Dr. DE LA CRUZ BURELO, Eduard       |

**Hadronic Matter - Audiovisual-2 (18:00-18:30)**

**Perturbative QCD, Jets and Diffractive Physics.**

**Hadronic Structure, soft QCD, Spectroscopy.**

**Heavy Ion Collisions and Soft Physics at Hadron Colliders.**

**Lattice Results.**

**Instrumentation.**

- **Conveners:** Dr. Barranco, Juan

| time  | [id] title                                                                 | presenter                           |
|-------|---------------------------------------------------------------------------|-------------------------------------|
| 18:00 | [50] Search for Z rare decays with CDF data.                              | Ms. PSIHAS, Fernanda                |

**Hadronic Matter - Audiovisual-1 (18:00-19:30)**

**Perturbative QCD, Jets and Diffractive Physics.**

**Hadronic Structure, soft QCD, Spectroscopy.**

**Heavy Ion Collisions and Soft Physics at Hadron Colliders.**

**Lattice Results.**

**Instrumentation.**

- **Conveners:** Prof. Krein, Gastao

| time  | [id] title                                                                 | presenter                           |
|-------|---------------------------------------------------------------------------|-------------------------------------|
| 18:00 | [16] Conformal symmetry patterns in high-lying unflavored meson spectra   | Dr. KIRCHBACH, Mariana              |
| 18:30 | [23] Electromagnetic moments of elementary particles from a second order  | Dr. DELGADO-ACOSTA, Ernesto Germán |
|       | formalism                                                                 |                                     |
| 19:00 | [70] Renormalization of Second Order Formalism for Spin 1/2 Fermions      | Mr. RENÉ, Ángeles-Martínez         |

**Electroweak and Flavor Physics - Audiovisual-2 (18:30-19:30)**
**Quark masses and mixing**

**Electroweak Symmetry Breaking**

**Heavy Quark Physics**

**Neutrinos**

**CP Violation, CKM and Rare Decays**

- **Conveners: Dr. Barranco, Juan**

| time    | [id] | title                                                                                                                                                                                                 | presenter                          |
|---------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 18:30   | [68] | Measurement of the CP-violating phase $\phi_s^{J/\psi \phi}$ using the flavor-tagged decay $B_s^0 \rightarrow J/\psi \phi$ in 8 fb$^{-1}$ of $p \overline{p}$ collisions                        | Mr. MAGAÑA VILLALBA, Ricardo       |
| 19:00   | [67] | Signal of FCNC and CPV through $h \rightarrow c \overline{b} W^-$ in two Higgs doublet model                                                                                                           | Dr. HALIM, José                    |
# Saturday 22 October 2011

## Revision: Electroweak and Flavor, R6 - Auditorio Jorge Ibargüengoitia (09:00-10:00)
- Conveners: Dr. Delepine, David

| time  | [id] | title                                           | presenter                  |
|-------|------|-------------------------------------------------|----------------------------|
| 09:00 | [25] | Probing new physics at SuperKEKB               | Dr. YAMAUCHI, Masa         |

## Revision: Electroweak and Flavor, R7 - Auditorio Jorge Ibargüengoitia (10:00-11:00)
- Conveners: Dr. Delepine, David

| time  | [id] | title         | presenter                      |
|-------|------|---------------|--------------------------------|
| 10:00 | [32] | Flavor now and then | Dr. ARANDA, Alfredo            |

## Electroweak and Flavor Physics - Auditorio Jorge Ibargüengoitia (11:30-13:30)

- Quark masses and mixing
- Electroweak Symmetry Breaking
- Heavy Quark Physics
- Neutrinos
- CP Violation, CKM and Rare Decays

| time  | [id] | title                                                   | presenter                                  |
|-------|------|---------------------------------------------------------|--------------------------------------------|
| 11:30 | [66] | The SuperB project : physics potential and current status | Dr. GUY, Wormser                           |
| 12:30 | [42] | The flavour permutational symmetry S(3)                | Prof. MONDRAGON BALLESTEROS, Alfonso       |
| 13:00 | [28] | Effects of heavy Majorana neutrinos in semileptonic heavy quark decays | Mr. QUINTERO POVEDA, Néstor                |

## Electroweak and Flavor Physics - Auditorio Jorge Ibargüengoitia (16:00-16:30)

- Quark masses and mixing
- Electroweak Symmetry Breaking
- Heavy Quark Physics
- Neutrinos
- CP Violation, CKM and Rare Decays

| time  | [id] | title                                                 | presenter                  |
|-------|------|-------------------------------------------------------|----------------------------|
| 16:00 | [18] | Single Top quark production at lepton colliders       | Dr. LARIOS, Francisco       |

## Revision: Electroweak and Flavor R8 - Auditorio Jorge Ibargüengoitia (16:30-17:30)
- Conveners: Dr. Mondragón, Alfonso

| time  | [id] | title                                                  | presenter                 |
|-------|------|--------------------------------------------------------|----------------------------|
| 16:30 | [57] | Neutrino oscillations and non standard interactions    | Dr. OMAR, Miranda          |
**Hadronic Matter - Auditorio Jorge Ibargüengoitia (18:00-19:00)**

*Perturbative QCD, Jets and Diffractive Physics.*

*Hadronic Structure, soft QCD, Spectroscopy.*

*Heavy Ion Collisions and Soft Physics at Hadron Colliders.*

*Lattice Results.*

**Instrumentation.**

- Conveners: Dr. Weber, Axel

| time   | [id] | title                                                                 | presenter                          |
|--------|------|----------------------------------------------------------------------|------------------------------------|
| 18:00  | [37] | The omega-rho-pi coupling and the influence of heavier resonances    | Dr. TOLEDO, Genaro                 |
| 18:30  | [80] | An approach for the Quantization of Spin- 3/2 beyond the Rarita-Schwinger Framework. | Dr. VILLANUEVA, Victor            |

**Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (19:00-19:30)**

*Cosmic Rays*

*Gamma Ray Bursts*

*Beyond the Standard Model (theory and experimental searches)*

*Strings*

*Cosmology*

- Conveners: Dr. Weber, Axel

| time   | [id] | title                  | presenter            |
|--------|------|------------------------|----------------------|
| 19:00  | [82] | The Lorentz violation in a 5D susy model. | Mr. GARCÍA, José Didino |
Monday 24 October 2011

**Revision: Astroparticles, Cosmology, Strings and Beyond the Standard Model, R9 - Auditorio Jorge Ibargüengoitia (09:00-10:00)**
- Conveners: Dr. Mondragón, Myriam

| time  | [id] | title                                                                 | presenter         |
|-------|------|----------------------------------------------------------------------|-------------------|
| 09:00 | [63] | Probing the small-scale structure of spacetime                      | LEHNERT, Ralf     |

**Revision: Astroparticles, Cosmology, Strings and Beyond the Standard Model, R10 - Auditorio Jorge Ibargüengoitia (10:00-11:00)**
- Conveners: Dr. Mondragón, Myriam

| time  | [id] | title                                                                 | presenter         |
|-------|------|----------------------------------------------------------------------|-------------------|
| 10:00 | [14] | The Cosmic Frontier: Cosmic Rays, Gamma Rays, and Neutrinos         | Dr. SINNIS, Gus   |

**Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (11:30-13:30)**

- *Cosmic Rays*
- *Gamma Ray Bursts*
- *Beyond the Standard Model (theory and experimental searches)*
- *Strings*
- *Cosmology*

- Conveners: Dr. Loaiza, Oscar

| time  | [id] | title                                                         | presenter         |
|-------|------|--------------------------------------------------------------|-------------------|
| 11:30 | [53] | E-instantons in Two Dimensional Models                       | GARCÍA COMPEÁN, Hugo |
| 12:00 | [56] | SUSY breaking in the baryonic branch                          | Dr. CÁCERES, Elena |
| 12:30 | [65] | Noncommutative Minisuperspace and Lambda                     | Dr. SABIDO, Miguel |
| 13:00 | [10] | Towards flavor physics from the heterotic string             | Dr. RAMOS-SANCHEZ, Saul |

**Astroparticles, Cosmology, Strings and Beyond the Standard Model - Auditorio Jorge Ibargüengoitia (16:00-17:30)**

- *Cosmic Rays*
- *Gamma Ray Bursts*
- *Beyond the Standard Model (theory and experimental searches)*
- *Strings*
- *Cosmology*

- Conveners: Dr. Zepeda, Arnulfo

| time  | [id] | title                                                   | presenter         |
|-------|------|---------------------------------------------------------|-------------------|
| 16:00 | [17] | Simulation of Fano Factor in HAWC-30 Array              | CASTILLO, Mario   |
| 16:30 | [30] | Ultra-high energy extragalactic neutrinos interacting with ultra-light dark matter | Dr. MOURA, Celio |
### Astroparticles, Cosmology, Strings and Beyond the Standard Model - Audiovisual-1

**18:00-19:30**

- *Cosmic Rays*
- *Gamma Ray Bursts*
- *Beyond the Standard Model (theory and experimental searches)*
- *Strings*
- *Cosmology*

- Conveners: Dr. Arteaga, Juan Carlos

| time  | [id] | title                                                                 | presenter                  |
|-------|------|----------------------------------------------------------------------|----------------------------|
| 18:00 | [41] | Study of cosmic rays in the range of $10^{17-10^{18}}$ eV with extensions of Pierre Auger Observatory. | Mr. VARELA, Enrique         |
| 18:30 | [13] | Cosmological model by flux compactification in generalized varieties  | DAMIAN, Cesar              |
| 19:00 | [21] | Near-horizon geometry from flux compactification                     | VAZQUEZ MERCADO, Liliana   |

### Hadronic Matter - Audiovisual-2 (18:00-19:30)

**Perturbative QCD, Jets and Diffractive Physics.**

**Hadronic Structure, soft QCD, Spectroscopy.**

**Heavy Ion Collisions and Soft Physics at Hadron Colliders.**

**Lattice Results.**

- Conveners: Dr. Hofmann, Christoph

| time  | [id] | title                                                                 | presenter                  |
|-------|------|----------------------------------------------------------------------|----------------------------|
| 18:00 | [20] | Dyson-Schwinger equations for infrared Yang-Mills theories in different dimensions | Mr. DALL'OLIO, Pietro      |
| 18:30 | [26] | Search for dilepton and lepton+ MET resonances at high mass with ATLAS Experiment at LHC | Ms. CASTANEDA-MIRANDA, Elizabeth |
| 19:00 | [38] | A Bethe-Salpeter equation for unstable states.                       | Mr. MALDONADO, VILLAMIZAR, Felix |
Tuesday 25 October 2011

**Revision: Hadronic Matter, R11** - Auditorio Jorge Ibargüengoitia (09:00-10:00)
- Conveners: Dr. Bietenholz, Wolfgang
  - time | id | title | presenter
  - 09:00 | 5 | Review on Unitary ChPT | Dr. OLLER, José Antonio

**Revision: Hadronic Matter, R12** - Auditorio Jorge Ibargüengoitia (10:00-11:00)
- Conveners: Dr. Bietenholz, Wolfgang
  - time | id | title | presenter
  - 10:00 | 62 | Quarkonia and heavy-flavour production in heavy-ion collisions | Dr. TAPIA TAKAKI, Daniel

**Hadronic Matter** - Auditorio Jorge Ibargüengoitia (11:30-13:30)

*Perturbative QCD, Jets and Diffractive Physics.*

*Hadronic Structure, soft QCD, Spectroscopy.*

*Heavy Ion Collisions and Soft Physics at Hadron Colliders.*

*Lattice Results.*

*Instrumentation.*
- Conveners: Dr. Oller, José Antonio
  - time | id | title | presenter
  - 11:30 | 51 | Results from the LHCb Experiment | POLYCARPO, Érica
  - 12:30 | 2 | Baryon properties in large-N chiral perturbation theory | Prof. FLORES, Ruben
  - 13:00 | 49 | Baryon chiral perturbation theory transferred to hole-doped antiferromagnets on the honeycomb lattice | Dr. HOFMANN, Christoph

**Hadronic Matter** - Auditorio Jorge Ibargüengoitia (16:00-16:30)

*Perturbative QCD, Jets and Diffractive Physics.*

*Hadronic Structure, soft QCD, Spectroscopy.*

*Heavy Ion Collisions and Soft Physics at Hadron Colliders.*

*Lattice Results.*

*Instrumentation.*
- Conveners: Dr. Moura, Celio
Electroweak and Flavor Physics - Auditorio Jorge Ibargüengoitia (16:30-17:30)
* Quark masses and mixing
* Electroweak Symmetry Breaking
* Heavy Quark Physics
* Neutrinos
* CP Violation, CKM and Rare Decays

- Conveners: Dr. Moura, Celio

| time       | [id] title                                                      | presenter                   |
|------------|----------------------------------------------------------------|----------------------------|
| 16:00      | [4] Spin and flavor content of octet baryons                   | Dr. BIJKER, Roelof           |
| 16:30      | [54] The decay D+ -> K- pi+ pi+                              | Dr. RAMÍREZ, Carlos         |
| 17:00      | [79] R for the Mu2e Experiment                                | CARMINE, Pagliarone         |

Astroparticles, Cosmology, Strings and Beyond the Standard Model - Audiovisual-1 (18:00-18:30)
* Cosmic Rays
* Gamma Ray Bursts
* Beyond the Standard Model (theory and experimental searches)
* Strings
* Cosmology

- Conveners: Dr. Delgado, Germán

| time       | [id] title                                                      | presenter                   |
|------------|----------------------------------------------------------------|----------------------------|
| 18:00      | [19] High-energy neutrino production in active galactic nuclei | Dr. ARTEAGA VELAZQUEZ, Juan Carlos |

Electroweak and Flavor Physics - Audiovisual-2 (18:00-19:00)
* Quark masses and mixing
* Electroweak Symmetry Breaking
* Heavy Quark Physics
* Neutrinos
* CP Violation, CKM and Rare Decays

- Conveners: Dr. Gómez Bock, Melina

| time       | [id] title                                                      | presenter                   |
|------------|----------------------------------------------------------------|----------------------------|
| 18:00      | [33] Tensorial Non Standard and Unparticle interactions in neutrino-electron Scattering. | GARCES, Estela              |
| 18:30      | [31] On the Higgs potential in the MS3IESM                      | Mr. SALDAÑA SALAZAR, Ulises Jesús |

Hadronic Matter - Audiovisual-1 (18:30-19:30)
Perturbative QCD, Jets and Diffractive Physics.

Hadronic Structure, soft QCD, Spectroscopy.

Heavy Ion Collisions and Soft Physics at Hadron Colliders.

Lattice Results.

Instrumentation.

- Conveners: Dr. Delgado, Germán

| time | id | title | presenter |
|------|----|-------|-----------|
| 18:30 | [27] | Topological summation in lattice gauge theory | Dr. BIETENHOLZ, Wolfgang |
| 19:00 | [76] | Searches for TeV-gravity signatures in final states with lepton and Jets with the ATLAS detector | CASTAÑEDA HDZ., Alfedro |

Astroparticles, Cosmology, Strings and Beyond the Standard Model - Audiovisual-2 (19:00-19:30)

* Cosmic Rays
* Gamma Ray Bursts
* Beyond the Standard Model (theory and experimental searches)
* Strings
* Cosmology

- Conveners: Dr. Gómez Bock, Melina

| time | id | title | presenter |
|------|----|-------|-----------|
| 19:00 | [44] | A WWW Interface to generate Aires & Corsika Steer Files. | Mr. DE LEÓN ACUÑA, Cederik León |
Wednesday 26 October 2011

Electroweak and Flavor Physics - Auditorio Jorge Ibargüengoitia (09:00-11:00)

* Quark masses and mixing
* Electroweak Symmetry Breaking
* Heavy Quark Physics
* Neutrinos
* CP Violation, CKM and Rare Decays

- Conveners: Dr. Félix Beltrán, Olga

| time  | [id] | title                                                                                   | presenter                                      |
|-------|------|-----------------------------------------------------------------------------------------|------------------------------------------------|
| 09:00 | [36] | The I-tracker proposal for MU2E Experiment at Fermilab                                   | Prof. PAGLIARONE, Carmine Elvezio, Francesco   |
| 10:00 | [55] | Higgs renormalization in the NMSSM                                                      | Dr. GÓMEZ BOCK, Melina                         |
| 10:30 | [29] | Flavour Parametrization of couplings with fermions in the 2HDM: the case with the 4-zero texture mass matrix | Dr. LÓPEZ, Lao Tse                              |

Summaries I,II and III - Auditorio Jorge Ibargüengoitia (11:30-13:30)

- Conveners: Dr. Napsuciale, Mauro