



WELCOME TO LISHEP2023

SESSION C

WORKSHOP

COSMOLOGY AND PARTICLES

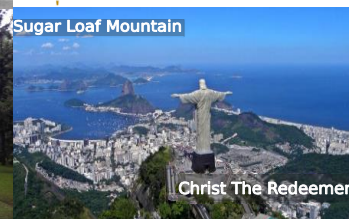
MARCH 6 - 10

UERJ – RIO DE JANEIRO

OPENING SESSION



Botanical Gardens

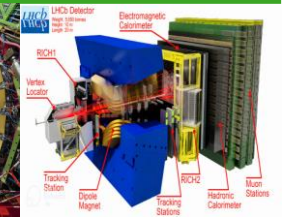


Christ The Redeemer



Museum of Tomorrow

LISHEP 2023
WORKSHOP ON HIGH ENERGY PHYSICS



Sessão A - Tópicos Principais

Cosmologia e Física de Partículas

<https://indico.cern.ch/event/1181215/>

Março 1 - 3 - Rio de Janeiro

Session C - Main Topics

Cosmology and Particle Physics

<https://indico.cern.ch/event/1181208/>

March 6 - 10 - Rio de Janeiro

INTERNATIONAL ADVISORY COMMITTEE

COMITÊ LOCAL DE ORGANIZAÇÃO

- Luiz Mundim - UERJ
- Alberto Santoro - UERJ
- Dilson Damiano - UERJ
- Eliza Melo - UERJ
- Gilvan Alves - CBPF
- Ignácio Bediaga - CBPF
- Wagner Carvalho - UERJ
- Helena Malbouisson - UERJ
- Yara Coutinho - UFRJ
- Vitor Oguri - UERJ

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- Joel Butler - FNAL - USA
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- Tulika Bose - USA
- Gerardo Herrera - CINVESTAV - México
- Carlos Garcia Canal - U.N. La Plata - Argentina
- Kajari Mazumdar - TIFR - Índia
- Lia Meringim - FNAL - USA
- Guido Tonelli - Pisa - CMS - Itália
- Yifang Wang - IHEP - China
- João Varela - LIP - Portugal
- Kirsti Aspola - CERN
- Carlos Andrés Flores - Colombia
- Luciano Maiani - Roma - Italy
- Gilles Cohen-Tannoudji - France
- Harvey Newman - CALTECH - USA
- José WF VALE - IFIC - Spain

ORGANIZADORES
EQUIPE TÉCNICA
Ver na página web

E-mail: lishepoficial@gmail.com

LOCAL ORGANIZERS
TECHNICAL SUPPORT
Please see the webpage





UERJ - Universidade do Estado do Rio de Janeiro

Session C: Cosmology and Particles
March 6 - 10

OPENING SESSION

WELCOME TO LISHEP2023

Speakers and participants .

Good Morning to all of you and thank you for coming to LISHEP2023. It is very important your visit and Participation here at UERJ High Energy Physics discussions.

I should inform you some practical procedures during these days
PLEASE DO YOURSELF THE UPLOAD OF YOUR TALK

Please use mask inside
of the auditorium



PEOPLE THAT RECEIVED FINANCIAL SUPPORT FROM LISHEP:

Please present to our secretariat the **AIR TICKET ARRIVAL
AND DEPART BOARDING PASS**. Our Financial
Support Agency need this too.

We have a few changes on the time table to accommodate
all problems appear in the last week.

Posters will be presented during the coffee breaks, the
autors will be present around the Poster to discuss with
interested persons.



LISHEP2023 Session C –Workshop in High Energy Physics – COSMOLOGY AND PARTICLES

Monday MARCH 6 2023

OPEN SESSION – CHAIR: Alberto Santoro/Harvey Newman —Scientific Secretary: Kevin Mota

| | | |
|---------------|---|-------------------------|
| 09:00 - 09:30 | A.Santoro (15') , A.Santoro(5'), Harvey Newman (5') , Asantoro (fecho a Mesa com ultimos aviso) | |
| 09:30 - 10:30 | Physics at the High Energy Physics Frontier | Michelangelo Mangano |
| 10:30 - 10:50 | Coffee Break | |
| 10:50 - 11:50 | Physics case for a e^+e^- factory and beyond | Christophe Grojean |
| 11:50 - 12:50 | CMS-TALK | Lucas Malgeri |
| 12:50 - 14:00 | Lunch Time | |
| | chair: Yara Coutinho Sec. Cient. Mariana Araujo | |
| 14:00 - 14:50 | Higgs Results from the LHC: A Journey of Discovery - | Harvey Newman |
| 14:50 - 15:40 | Quantum Fields and the cosmological constant: de Sitter -Anti de Sitter and all that | Ugo Moschella |
| 15:40 - 16:00 | Standard Model PDF's for the Muon Collider | Sokratis Trifinopoulos |
| 16:00 - 16:20 | Search for BSM Physics in CMS | Andre Frankenthal |
| 16:20 - 16:40 | Highlights of the CMS Electrocalorimeter | Patricia Rebello Telles |
| 16:40 - 17:00 | Results on New Physics with the CMS Precision Proton Spectrometer | Gustavo Gil Da Silveira |
| 17:00 | WELCOME COCKTAIL | Capela da UERJ |

March 6 - 10

LISHEP2023 Session C –Workshop in High Energy Physics – COSMOLOGY AND PARTICLES
TUEDAY MARCH 7 2023
MORNING

CHAIR SESSION: Helio Nogima SCIENTIFIC SECRETARY: Silas Santos

| | | |
|---------------|---|---------------------------|
| 09:00 – 10:00 | High Energy Physics in China: Present and Future | Shuangshi Fang |
| 10:00 – 10:20 | Coffee Break | |
| 10:20 – 11:20 | Highlights from ATLAS | Marisilvia Donadelli |
| 11:20– 12:20 | FCC-ee | Gregorio Bernardi |
| 12:20 – 14:00 | LUNCH TIME | |
| | chair: Luiz Mundim AFTERNOON Sec.Cient. Rafael Gomes | |
| 14:00 – 14:50 | Searches for Exotic Mesons: Perspective from the Gluex Experiment | Jonathan Zarling |
| 14:50 – 15:40 | Future Colliders: Cool Copper Collider and Muon Collider | Sridhara Dasu |
| 15:40 – 16:30 | iRPC – innovative CMS RPC project for HL-LHC datataking. | Nuno Leonardo |
| 16:30 – 16:50 | Coffee Break | |
| 16:50 – 17:10 | <u>Standard Model and top results from ATLAS</u> | Carlos Alberto Gottardo |
| 17:10 – 17:30 | Heavy Flavour results from ATLAS | Markus Cristinziani |
| 17:30 – 17:50 | <u>Search for BSM Physics in ATLAS</u> | Rafael Coelho Lopes de Sá |
| 17:50 - 18:10 | Highlights of SM and TOP results from CMS | Prolay Kumar Mal |
| | | |
| | | |



**LISHEP2023 Session C –Workshop in High Energy Physics – COSMOLOGY AND PARTICLE
WEDNESDAY MARCH 8 2023
MORNING**

Chair: Helio da Motta / Marcia Begalli

-- Scientific Secretary Mateus Reis

| | | |
|----------------|---|---------------------------------|
| 09:00 - 10:00 | Cosmic Rays Physics | Carola Dobrigkeit Chinellato |
| 10:00 - 10:20 | COFFEE BREAK | |
| 10:20 - 11: 20 | Highlights from LHCb | Bruno Souza de Paula |
| 11:20 - 12:20 | HEP Instrumentation | Marcel Dermateau |
| 12:20 - 14:00 | LUNCH TIME | |
| | Chair: Ignácio Bediaga | AFTERNOON Marcelle Lopes |
| 14:00 - 14:50 | The Status of Neutrino Physics | Renata Zukanovich |
| 14:50 - 15:40 | The Fermilab High Energy Physics Program:Present and Future | Lia Meringa |
| 15:40 - 16:20 | Pressure Distribution inside Nucleon Tsalis MIT Bag Model | Gerardo Herrera |
| 16:20 - 16:40 | COFFEE BREAK | |
| 16:40 - 17:00 | Fixed Target and Heavy-Ioon results at LHCb | Pasquale Di Nezza |
| 17:00 - 17:20 | Direct CP-Violation in Charm Decays at LHCb - | Felipe Luan Souza de Almeida |



LISHEP2023 Session C -Workshop in High Energy Physics -COSMOLOGY AND PARTICLES Thursday MARCH 9 2023 MORNING

Chair : Luiz Mundim

Scientific Secretary: Mateus Macedo

| | | |
|---------------|--|------------------------------|
| 09:00 -10:00 | Glueballs and Search Exotic Searchers at BESIII | Shuangshi Fang |
| 10:00 - 10:20 | Coffee Break | |
| 10:20 -11:20 | Highlights from ALICE Experiment | Kai Schweda |
| 11:20- 12:20 | A New Generation of Worldwide Systems for Data Intensive Sciences: The Global Network Advancement Group | Harvey Newman |
| 12:20 - 14:00 | LUNCH TIME | |
| | Gilvan Alves | AFTERNOON Lucas Kopke |
| 14:00 - 14:50 | Emissions of Fluorinated Gaseous from CMS in RUN3 and Perspectives for RUN4 and Beyond | Gabriella Pugliese |
| 14:50 - 15:40 | Global Fits to Effective Fiel Theories | Oscar Eboli |
| 15:40 - 16:30 | Snowmass | Joel Butler |
| 16:30 - 16:50 | Coffee Break | |



LISHEP2023 Session C -Workshop in High Energy Physics - COSMOLOGY AND PARTICLES

FRIDAY MARCH 10, 2023

Chair Sandro Fonseca

Scientific Secretary Lucas Johnny

MORNING

| | | |
|---------------|---|-------------------|
| 09:00 - 09:40 | Neutrino Physics Benchmark for Colliders | José W F Valle |
| 09:40 - 10:00 | Coffee Break | |
| 10:00- 11:0 | Multiquark exotics | Tomasz Skwarnicki |
| 11:00 - 11:20 | Higgs Results and Prospects from CMS | Siridhara Dasu |
| 11:20 - 11:40 | CP Violation in Charmless three Body B-Decays | Diego Maachado |
| 11:40 - 12:30 | Spin Physics with LHC spin | Pasquale Di Nezza |
| 12:30 - 14:00 | Lunch Time | |

Chair: J. Chinellato

AFTERNOON

Scientific Secretary: Alan Jales

| | | |
|---------------|---|---------------|
| 14:00 - 15:00 | Beyond Standard Model | JoAnne Hewett |
| 15:00 - 15:50 | Precision and Discovery - The Physics Potential of Linear Colliders | Roman Roman |
| 15:50- 16:10 | Higgs results and Prospects from ATLAS | Jiayi Chen |
| 16:10 - 16:50 | CLOSING SESSION | |



CITY TOUR and CONFERENCE DINNER

We will do a Tour in Rio. It is absolutely necessary to do registration for the CITY TOUR and the CONFERENCE DINNER. We need to close the contract with the Tourism Agency. **REGISTRATION UNTIL 15:00 TODAY**

Tours for Accompany Persons. Please talk with our secretariat.



Office:

Alessandra Aguiar

Marcio Faria

Eliza Mello

Leonardo Santoro

with help of

Kirsti Aspola

Computing : wifi will be available on the Auditorium

name of the network: LISHEP2023

Password: LISHEP@UERJ

Talks

Each day we have Talks available on the Timetable in the WEB page. Please upload your talk.



LISHEP2023 PROCEEDINGS

For those that would like publish his paper we have a solution. As we will not do a proceeding of session C, the book of session A, will have space to put your paper, if you want. Just tell us what you want to do. We would like to publish by June (the book of session A). Then you have to give us the final text by April / May.

Therefore, each author should create his file, using Docx, containing his full contribution for the Book and then contact **Vitor Oguri** (lishepoficial@gmail.com) one of the Editor committee member of LISHEP. We will do the translation for Latex.



Secure Yourself

- If you decide to go out, Please do with a group not alone.
- Don't react if you are attacked by a pickpocket.
- Do not use attractive Cameras, too much rings and gold.
- Any eventual bad situation please communicate with us promptly.

Telephones:



Alberto Santoro +55 21 98117.7771 - Cellular Phone
Eduardo Revoredo – 21- 996460316 – Cel..



Attention: After the last talk today we will have the Welcome Cocktail in the “Capela of UERJ” (we go together)

Have a good Session C – LISHEP2023

Thank you