

# ADVANCED SCHOOL - CERN 2021



Sharing my experiences after participating in the School of Teachers at CERN in 2015

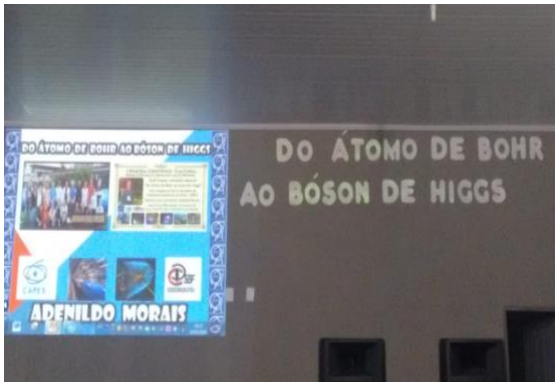


**ADENILDO MORAIS**



ONLINE Portuguese Language Teacher Programme

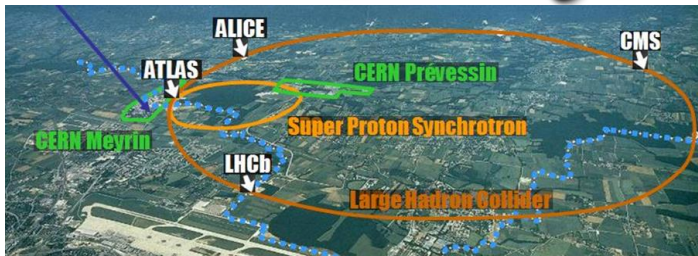
# "DO ÁTOMO DE BOHR AO BÓSON DE HIGGS" PRIMEIRO ENCONTRO



**\*First lecture right after my return. My school community eagerly awaited the transfer of acquired knowledge. The impact of a Physics teacher after participating in the School of Physics at CERN is impressive, it positively affects students, teachers, supervisors, principals and others.**



# CERN - QUE 'BICHO' É ESSE?



### Partículas Elementares e Modelo Padrão

As partículas fundamentais são: quarks, léptons, bósons e férmions. O Modelo Padrão descreve as interações entre elas.

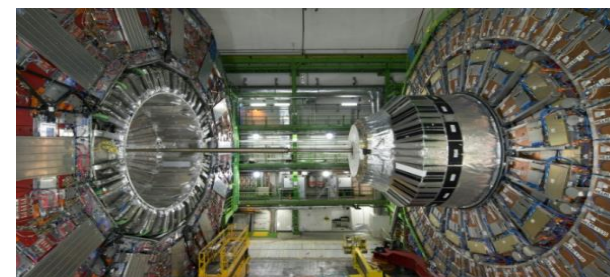
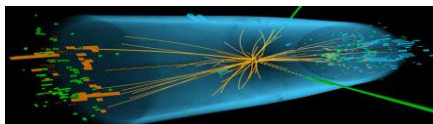
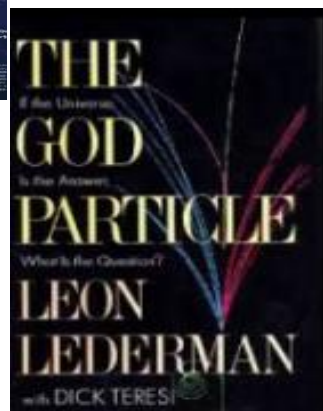
Quarks	Léptons	Bósons	Férmions
$u, d, s, c, b, g$	$e, \mu, \tau, \nu_e, \nu_\mu, \nu_\tau$	$W, Z, \gamma, g, \dots$	$P, \dots$

**Quarks:**  $u, d, s, c, b, g$

**Léptons:**  $e, \mu, \tau, \nu_e, \nu_\mu, \nu_\tau$

**Bósons:**  $W, Z, \gamma, g, \dots$

**Férmions:**  $P, \dots$



**\*Explanation of what CERN is and its importance. To be a multiplier is to plant a seed of scientific knowledge in students.**



# SEMANA DA LICENCIATURA EM FÍSICA - IFNMG CAMPOS SALINAS



**Marta Máximo – Escola de Física no CERN 2010**  
**Francisco Pazzini - Escola de Física no CERN 2010**  
**Adenildo Moraes - Escola de Física no CERN 2015**

**\*Roundtable about CERN and its discoveries with professors who participated in different editions of the program, for undergraduate students in Physics.**



# AÇÕES NO PIBID - UFVJM - FISICANDO



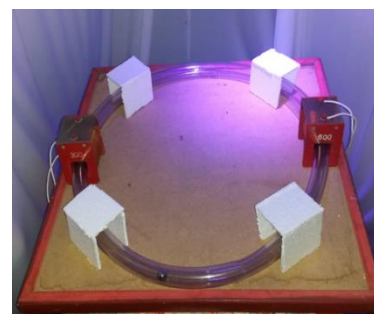
**\*PIBID - Teaching Initiation Program;**

**\*FISICANDO - Group of public school students created to talk about particle physics and the development of science.**



# FEIRA DE CIÊNCIAS COM FÍSICA DE PARTÍCULAS

## ESCOLA ESTADUAL OSWALDO LUCAS MENDES



**\*Science fair with students taking the lead and passing on CERN's studies and their importance to the community.**



## PROFESSORES SELECIONADOS PARA A ESCOLA DE FÍSICA CERN 2015

Cumprimentando a todos os professores e professoras que se inscreveram, informamos os/as selecionados/as para esta Escola de Física CERN 2015, com quem em breve entraremos em contato para os encaminhamentos necessários.

### **ADENILDO OLIVEIRA MORAIS**

ANI SOBRAL TORRES

ASTROGECILDO UBAIARA BRITO

CICERO JACKSON PINHEIRO BESERRA

CLÁUDIA COSTA LOPES GONÇALVES SOSINHO

CLEIDE MATHEUS RIZZATTO

DENER DA SILVA ALBUQUERQUE

DIOGO CHITOLINA

EDUARDO VIEIRA DE REZENDE

ELIANA FERNANDES BORRAGINI

ELIZABETH ZAKI GONÇALVES SEVERINO

FRANCISCO AGENOR ALVES MARQUES

LUIS OTAVIO RAMOS TORRES

MARCOS ANTONIO TORRES MÜLLER

MIGUEL LOURENÇO NETO

RAFAEL VASQUES BRANDÃO

REINALDO ESPINOSA

ROBERTO RODRIGUES GOMES

TONY MARCIO GROCH

VALÉRIA BONETTI JERZEWSKI

VINICIUS JACQUES

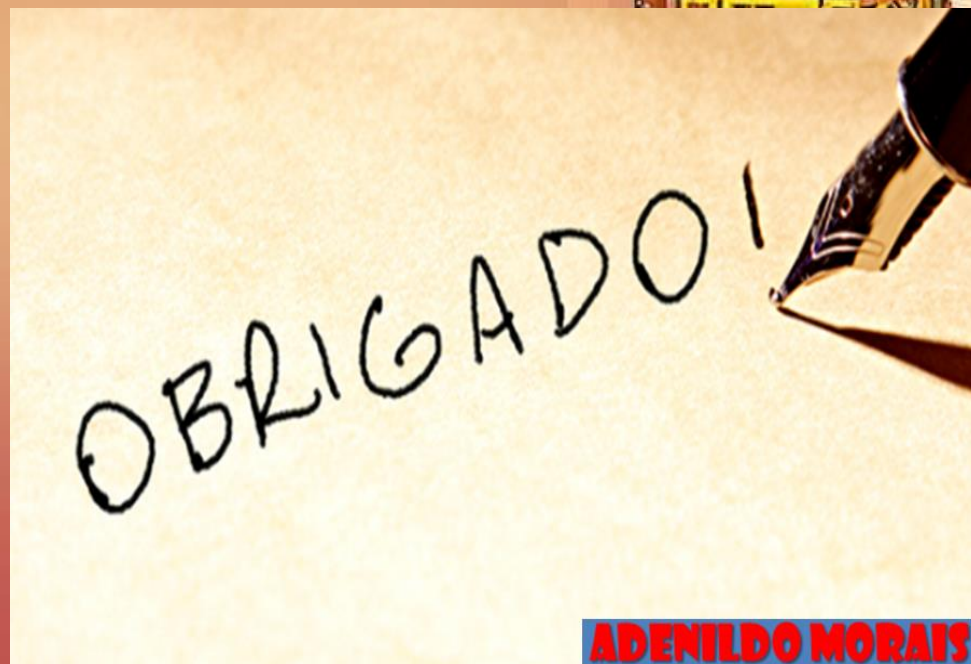
WESLEY MATOS CIDREIRA

Prof. Nilson Marcos Dias Garcia

Coordenador da Escola de Física CERN 2015

Prof. Nelson Barrelo Jr.

Coordenador Auxiliar da Escola de Física CERN 2015



**ADENILDO MORAIS**