

**Session Program**

**26-30 Nov 2018**



**DISCRETE 2018**

***Plenary***

# Monday 26 November

09:00

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA | **Convener:** Jose Bernabeu

09:00–09:35

### Binary neutron star mergers: Observations and modelling in multimessenger astronomy era

**Speaker**

Albino Perego

09:35–10:10

### The Electric Dipole Moment of the Neutron and the PanEDM Experiment

**Speaker**

Prof. Peter Fierlinger

10:10–10:45

### Overview on solar, geo, and reactor neutrino experiments

**Speaker**

Prof. Livia Ludhova

10:45

11:15

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA | **Convener:** Eberhard Widmann

11:15–11:50

### Electron EDM tests at ACME

**Speaker**

Prof. Gerald Gabrielse

11:50–12:25

### Photonic Quantum Communication

**Speaker**

Prof. Anton Zeilinger

12:25

14:00

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA | **Convener:** Johann Marton

14:00–14:35

### The European Strategy Update 2019/2020: Discussion on Priorities for Future Facilities

**Speaker**

Albert De Roeck

14:35–15:10

### Laser spectroscopy of antihydrogen in ALPHA

**Speaker**

Chris Rasmussen

15:10–15:45

### Parity Violation in Atomic Systems

**Speaker**

Prof. Klaus Jungmann

15:45-16:20

**Pushing the Energy and Cosmic Frontiers with High-Energy Astrophysical Neutrinos**

**Speaker**

Dr Mauricio Bustamante

16:20

# Tuesday 27 November

09:00

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA |  
**Convener:** Prof. Claude Amsler

09:00-09:35

### Experimental Neutrino CP violation searches

**Speaker**

Marco Zito

09:35-10:10

### Vacuum Induced CP Violation Generating a Complex CKM Matrix with Controlled Scalar FCNC

**Speaker**

Dr Miguel Nebot Gomez

10:10

10:40

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA |  
**Convener:** Antonio Di Domenico

10:40-11:15

### Protecting the Stability of the EW Vacuum

**Speaker**

Vincenzo Branchina

11:15-11:50

### Tests of discrete symmetries in positronium decays with the J-PET detector

**Speaker**

Dr Eryk Czerwiński

11:50

# Wednesday 28 November

09:00

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA | **Conveners:** Niki Saoulidou, Jeanette Miriam Lorenz

09:00-09:35

### Theoretical status of Flavor Anomalies

**Speaker**

Dr Javier Fuentes-Martin

09:35-10:10

### Collider physics at the intensity and energy frontier -- the HL-LHC and beyond

**Speaker**

Federico Meloni

10:10-10:45

### Higgs boson physics at LHC

**Speaker**

Roberto Salerno

10:45

11:15

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA | **Convener:** Vasiliki Mitsou

11:15-11:50

### Supersymmetry: Nil Carborundum

**Speaker**

John Ellis

11:50-12:25

### Natural Supersymmetric Twin Higgs

**Speaker**

Marcin Badziak

12:25

# Thursday 29 November

09:00

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA |  
**Conveners:** Margarida Nesbitt Rebelo Da Silva, Margarida Nesbitt Rebelo

09:00-09:35

### Global overview on neutrino masses, mixings and CP violation

**Speaker**

Dr Mariam Tórtola

09:35-10:10

### PT-symmetric quantum field theory

**Speaker**

Prof. Carl Bender

10:10-10:45

### Unidirectional Reflectionless Transmission of Light with and without PT Symmetry

**Speaker**

Prof. A. Douglas Stone

10:45

11:15

## Plenary

**Session** | **Location:** Festsaal, Austrian Academy of Sciences, Dr.-Ignaz-Seipel-Platz 2, 1010 Vienna, AUSTRIA |  
**Convener:** Gustavo Branco

11:15-11:50

### Spinor-vector duality and sterile neutrinos in string derived models

**Speaker**

Prof. Alon Faraggi

11:50-12:25

### Globally Consistent F-theory Standard Models with Matter Parity

**Speaker**

Mirjam Cvetič

12:25