

**Session Program**

**August 29, 2022 to September 2, 2022**



**SSP2022**

**8th International Symposium on Symmetries  
in Subatomic Physics (SSP2022)**

***Symmetries***

# Mon, August 29

10:00 AM

## Symmetries: Lepton flavour

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Prof. Claude Amsler

10:00 - 10:30 AM

### Lepton flavour universality at Belle and Belle II

**Speaker**

Dr Seema Choudhury

10:30 - 11:00 AM

### Tests of lepton flavour universality with (semi-)leptonic decays of charmed mesons

**Speakers**

Evelina Gersabeck , Evelina Mihova Gersabeck

11:00 AM

11:30 AM

## Symmetries: Lepton flavour

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Prof. Claude Amsler

11:30 AM - 12:00 PM

### Lepton flavour violation and symmetry searches at PSI

**Speaker**

Angela Papa

12:00 - 12:25 PM

### The Mu2e experiment at Fermilab

**Speaker**

Yuri Oksuzian

12:25 PM

2:50 PM

## Symmetries: eDM

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna

2:50 - 3:20 PM

### Progress towards the TRIUMF ultracold neutron facility and neutron electric dipole moment experiment

**Speaker**

Dr Rüdiger Picker

3:20 PM

4:00 PM

## Symmetries: eDM

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Ben Sauer

4:00 - 4:30 PM

### JEDI and beyond - the quest for EDMs of charged particles

**Speaker**

Dr Aleksandra Wrońska

4:30 - 5:00 PM

### Perspectives of EDM searches in Atoms and Molecules

**Speaker**

Lorenz Willmann

5:00 PM

## Tue, August 30

9:00 AM

### Symmetries: Hadronic reactions

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Prof. Claude Amsler

9:00 - 9:30 AM

#### Discrete symmetry tests using hyperon-antihyperon pairs at BESIII

**Speaker**

Andrzej Kupsc

9:30 - 10:00 AM

#### Symmetries in charm mesons and baryons from Belle/Belle II

**Speaker**

Dr Longke Li

10:00 - 10:30 AM

#### Recent results on T, CP and CPT tests with KLOE-2

**Speaker**

Francesca Curciarello

10:30 AM

11:00 AM

### Symmetries: Molecules

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Lorenz Willmann

11:00 - 11:25 AM

#### A laser cooled beam of YbF for measuring the electron electric dipole moment

**Speaker**

Ben Sauer

11:25 - 11:50 AM

#### Searches for CP-violating effects with YbF molecules

**Speaker**

Christopher Ho

11:50 AM

3:00 PM

### Symmetries: Leptonic reactions

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Eberhard Widmann

3:00 - 3:25 PM

#### Testing CP and CPT symmetries in ortho-positronium decays with J-PET detector

**Speaker**

Aleksander Gajos

3:25 - 3:50 PM

#### The MOLLER and P2 Experiments; High precision tests of the running of the Weak mixing angle

**Speaker**

Michael Gericke

3:50 PM

## Wed, August 31

9:00 AM

### Symmetries: Parity tests

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Hartmut Abele

9:00 – 9:30 AM

#### Low-energy experiments in search for new physics

**Speaker**

Dionysis Antypas

9:30 – 10:00 AM

#### Parity violation with neutrons

**Speaker**

Hirohiko Shimizu

10:00 – 10:30 AM

#### Fundamental Physics with Slow Neutrons

**Speaker**

Shinsuke Kawasaki

10:30 AM

11:00 AM

### Symmetries: Neutrinos

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Prof. Livia Ludhova

11:00 – 11:30 AM

#### The quest for leptonic CP violation

**Speaker**

Prof. Federico Sanchez

11:30 AM – 12:00 PM

#### CPT invariance and neutrinos

**Speaker**

Gabriela Barenboim

12:00 PM

3:00 PM

### Symmetries: Neutrons

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Hirohiko Shimizu

3:00 – 3:30 PM

#### Measurement of the free neutron decay: status and prospects

**Speaker**

Chen-Yu Liu

3:30 PM

3:30 PM

### Symmetries: Magnetic moments

**Session** | **Location:** University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna | **Convener:** Hirohiko Shimizu

3:30 – 4:00 PM

#### The g-2 experiment at FNAL

**Speaker**

David Kawall

4:00 PM

# Thu, September 1

9:00 AM	<p><b>Symmetries: Matter-antimatter symmetry</b>  <b>Session</b>   <b>Location:</b> University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna   <b>Convener:</b> Paolo Crivelli</p> <p>9:00 – 9:30 AM <b>The ALPHA Experiment</b>  <b>Speaker</b>  Andrew Evans</p> <p>9:30 – 10:00 AM <b>The Base Experiment</b>  <b>Speaker</b>  Stefan Erlewein</p> <p>10:00 – 10:30 AM <b>The ASACUSA Experiment</b>  <b>Speaker</b>  Dr Daniel James Murtagh</p>
10:30 AM	
2:30 PM	<p><b>Symmetries: BSM</b>  <b>Session</b>   <b>Location:</b> University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna   <b>Convener:</b> Ralf Lehnert</p> <p>2:30 – 3:00 PM <b>Fermion number violation with heavy neutrinos</b>  <b>Speaker</b>  Alain Blondel</p>
3:00 PM	
3:30 PM	<p><b>Symmetries: BSM</b>  <b>Session</b>   <b>Location:</b> University of Applied Arts Vienna Vordere Zollamtsstraße 7 1030 Vienna   <b>Convener:</b> Eberhard Widmann</p> <p>3:30 – 4:00 PM <b>Standard-Model Extension</b>  <b>Speaker</b>  Ralf Lehnert</p> <p>4:00 – 4:30 PM  <b>Tests of physics beyond the Standard Model with the g factor of few-electron ions</b>  <b>Speaker</b>  Dr Zoltan Harman</p> <p>4:30 – 5:00 PM  <b>Novel mechanisms of electric dipole moments in atoms and molecules</b>  <b>Speaker</b>  Dr Yevgeny Stadnik</p>
5:00 PM	