# **Session Program**

10-14 Jun 2024

# **PSAS'2024 - International Conference on Precision Physics of Simple Atomic Systems**

# **Poster Session 1**

ETH Zurich- Hönggerberg Campus

# Monday 10 June

#### 18:00

# **Poster Session 1**

Session | Location: ETH Zurich- Hönggerberg Campus

### 18:00-20:00

Low Repetition Rate Optical Frequency Combs for Precision Spectroscopy

## Speaker

Muhammad Thariq

#### 18:00-20:00 Towards laser cooling of negative molecular ions

Speaker

Matthias Germann

#### 18:00-20:00

High precision calculation of structural properties of three-body molecular ions

#### Speaker

Santanu Mondal

## 18:00-20:00

Calculating the many-potential vacuum polarization density of the Dirac equation in the finite-basis approximation

# Speaker

Dr Maen Salman

### 18:00-20:00

Calculations of the one-loop self-energy correction in one-electron systems with a numerical Green function

#### Speaker

Hugo Demattos Nogueira

#### 18:00-20:00

Regularized relativistic corrections for polyelectronic and polyatomic systems with explicitly correlated Gaussians

# Speaker

Balázs Rácsai

#### 18:00-20:00

Pair corrections to the no-pair Dirac-Coulomb(-Breit) energy of heliumlike systems

# Speaker

Ádám Nonn

#### 18:00-20:00

Towards the self-energy correction of the no-pair Dirac\$-\$Coulomb energy for two-electron systems

Speaker Adam Margocsy

#### 18:00-20:00

# Time and frequency standards at METAS and their applications for precision measurements

#### Speakers

Dr Antoine Jallageas, Dr Dominik Husmann, Dr Jacques Morel

#### 18:00-20:00

Realization of an XUV comb and measurement on its linewidth with frequency comb spectroscopy

#### Speaker

Linqiang Hua

#### 18:00-20:00

Long-range asymptotics of  $\Lambda^{3}- OR = 0$  Corrections in H\$\_2\$ and H\$\_2^+\$

Speaker

Grzegorz Łach

#### 18:00-20:00

Characterisation of an energetic beam of metastable positronium atoms for precision spectroscopy

# Speaker

Donovan Newson

#### 18:00-20:00

Hybrid Penning-Linear-Paul trap for ion recapture spectroscopy of hydrogen/ antihydrogen in a near-zero bias magnetic trap

#### Speaker

Levi Oliveira De Araujo Azevedo

### 18:00-20:00 Calculations of the even parity P and D states of the carbon atom.

### Speaker

Toreniyaz Shomenov

#### 18:00-20:00

# Calculation of spin-dependent relativistic corrections in small atoms with one and two p-electrons using explicitly correlated Gaussians

#### Speaker

Pavel Rzhevskii

#### 18:00-20:00

#### Status of laser spectroscopy of metastable antiprotonic helium atoms at CERN

#### Speaker

Masaki Hori

# 18:00-20:00 Experiments with hydrogen atoms at ultra-low energies

#### Speakers

Aleksei Semakin, Sergey Vasiliev

# 18:00-20:00 New apparatus for single-photon Doppler-free VUV/XUV spectroscopy

#### Speaker Matthew H. Rayment

18:00-20:00	
Injection of	f State-Selectively Prepared Molecular lons into a Radiofrequency Trap
<b>Speaker</b> Daniel Knapp	
18:00-20:00 Speaker	New Physics contributions to atomic spectra
Sotiris Pitelis	
18:00-20:00	High Precision Spectroscopy of the Hydrogen Molecule and its Ion
Speaker Daniel Ochoa	