Session Program

June 30, 2025 to July 4, 2025

ECAMP 15

Poster Session 3

Thu, July 3

3:15 PM

Poster Session 3

Poster Session | **Location:**

Xenon photoionization in the vicinity of 4d giant resonance and Cooper minimum using an XUV-NIR pump-probe experiment at FLASH

Speaker
Igor Litvinyuk

Detection of surface magnetism by x-ray spectroscopy of hollow atoms

Speaker
Martino Trassinelli

Theoretical investigation on positron binding properties in water clusters

Speaker
Daisuke Yoshida

Demonstration of strong coupling of a subradiant atom array to a cavity vacuum

Speaker
David Nagy

Josephson Oscillations in long ballistic channels

Speaker
Simon Wili

Fourier-limited electronic transitions in surface-adsorbed quantum emitters

Speaker
Dr Alexey Shkarin

Photodetachment vibronic dynamics using nonlocal dicrete-state-in-continuum model

Speaker
Mr Jan Zlatník

Reduced instability in a high-accuracy ^{115}In$^+$/^{172}Yb$^+$ Coulomb crystal optical clock

Speaker
Jonas Keller

Quantum Optimal Control of Molecular Orientation

Speaker
Juan José Omiste Romero

Real time observation of the formation of Li$^+$-benzene complexes

Speaker
Christian Engelbrecht Petersen

Cold electronic spectroscopy of metal phthalocyanine cations

Speaker
Elisabeth Gruber

Cryogenic hybrid trapping of Ca$^+$ ions and OH molecules for cold ion-molecule reaction studies

Speaker
Yanning Yin

Sunlight and the single atom - a photodetector for fundamental physics and daylight communications

Speaker
Laura Zarraoa

Laser cooling Rydberg molecules - He2

Speaker
Lucía Verdegay Fernández

Ionization Induced Dynamics

Speaker
Daniel Strasser

Zero-Point-Energy Driven Isotopic Exchange of the [H3O]- anion Probed by Mid-Infrared Action Spectroscopy

Speaker
Dennis Florian Dinu

Efficient computation of the classical bound of Bell correlation and prepare-and-measure witnesses in parallel environments

Speaker
István Márton

Thermal fading of the $1/k^4$-tail of the momentum distribution induced by the hole anomaly

Speaker
Giulia De Rosi

Observation of many-body dynamical localization

Speaker
Yanliang Guo

Miniature quantum devices build of dipole coupled nano arrays of quantum emitters

Speaker
Helmut Ritsch

Calculated absorption and circular dichroism spectra of TPPS4 molecular aggregates

Speaker
Laura Baliulyte

Mutual neutralization reactions in collisions between pyrimidine cations and oxygen and chlorine atomic anions

Speaker
Paola Bolognesi

Transfer ionization dynamics in collisions involving light ions and helium atoms

Speaker
Karoly Tokesi

ELECTRON-INDUCED FLUORESCENCE OF CARBON MONOXIDE

Speaker
Enmily Garcia

Electron collisions with molecular hydrogen for plasma-modelling applications

Speaker
Prof. Dmitry Fursa

The quadrupole ion trap apparatus for ionization cross-section experiments

Speakers
Mariusz Piwinski, Łukasz Kłosowski

Cryogenic apparatus for quantum logic spectroscopy of polyatomic molecular ions

Speaker
Mikhail Popov

Efficient excitation energy transfer in a bio-inspired stacked nanoscale quantum emitter ring geometry

Speaker
Arpita Pal

Non-Destructive Photon Number Measurement Using Quantum Phase Estimation

Speaker
Lucas Santos

Ab initio simulation of the interplay between an impurity and a measuring environment using ultracold atoms

Speaker
Katja Schneeweiss

Magnetic field system for AQuRA transportable quantum clock

Speaker
Michał Zawada

Efficient loading of ultracold atoms into standing wave potential near dielectric surface

Speaker
Ryota Hashimoto

Laser spectroscopy of the X-A transition in CO^{++}

Speakers
Xavier Urbain, Matthieu Génévriez

Self-ordering, cooling, and lasing in an ensemble of clock atoms

Speaker
Anna Bychek

NEGATIVE ION CHEMISTRY AMONG STARS AND CLOUDS : MOLECULAR PROCESSES IN THE INTERSTELLAR MEDIUM

Speaker
Prof. Franco Gianturco

Measuring ion-induced biomolecular fragmentation using a Velocity Map Imaging spectrometer

Speaker
Mr Antonin Bourgeteau

Zeeman-Sisyphus deceleration of ultra-cold CaF molecules

Speaker
Archie Baldock

The lifetime of a freely decaying hollow atom

Speaker
Matthias Werl

Multiple photoionization of singly charged lanthanum ions

Speaker
Michel Döhring

Highly oriented pyrolytic graphite chemical bonding structure after gallium implantation

Speaker
Karoly Tokesi

Liquid-jet Velocity Map Imaging

Speaker
Qi Zhou

A cavity-microscope for micrometer-scale control of atom-photon interactions

Speaker
Francesca Orsi

Femtosecond timed imaging of rotation and vibration of alkali dimers on the surface of helium nanodroplets

Speaker
Henrik Høj Kristensen

Observation of anomalous information scrambling in a Rydberg atom array

Speaker
Xinhui Liang

Ultrafast correlation dynamics during high-harmonic generation in multi-electron atoms

Speaker
Katharina Buczolich

Progress toward an atomic-beam continuous-wave superradiant laser

Speaker
John Huckans

Four-wave mixing in chip-scale Rb vapor cells in continuous wave mode

Speaker
Heleni Krelman

Creating and observing the hexadecapole moment in the fluorescence signal of the 87Rb D1 line: theoretical computations

Speaker
Daniela Jermacane

Dissipation dilution in 3D direct laser written mechanical resonators

Speaker
Daniel Stachanow

First-principles evaluation of the complete HHG observable in solids

Speaker
Dieter Bauer

Long-Term Electrostatic Trapping of Multiply Charged Helium Nanodroplets in a Multi-Reflectron Time-of-Flight Device

Speaker
Matthias Veternik

Partial-wave transitions in attosecond time delays and separability of Wigner delays

Speaker
Zdeněk Mašín

An Investigation into CMOS Sensors as Spatially & Spectrally Resolved Soft X-Ray Detectors for Laser Produced Plasma Imaging

Speaker
Éanna Donohoe

EXPERIMENTAL CHARACTERIZATION OF ALL VIBRATIONALLY EXCITED STATES OF THE X$^+$ $^2\Sigma_u^+$ GROUND ELECTRONIC STATE OF He$_2^+$

Speaker
Mr Maxime Holdener

Single and Double Ionization of Sn$^+$ and Sn$^+$ by Electron Impact

Speaker
Prof. Károly Tőkési

Searching for dark matter with a spin-based interferometer

Speaker
Grzegorz Łukasiewicz

Optical clock spectroscopy with Sr ensembles in reconfigurable tweezer arrays

Speaker
Jack Segal

Construction and Characterization of a Ca Magneto-Optical Trap for Rydberg Physics

Speaker
Matthieu Génévriez

Bosons in a 1D Quasiperiodic Optical Lattice studied via tVMC method

Speaker
Nikola Vukman

Tunable Field-Linked s-Wave Interactions in Dipolar Fermi Mixtures

Speaker
Jinglun Li

Towards all-optical entangled BECs in microgravity

Speaker
Jan Simon Haase

Electron-driven reactivity of molecular cations: from mechanisms to cross sections

Speaker
János Zsolt Mezei

High rotational quantum states in spin orbit state selected charge transfer reaction

Speaker
Dasarath Swaraj

Interfacing Rydberg atoms with a high overtone bulk acoustic wave resonator in the GHz regime

Speaker
Julia Gamper

Tailoring optical response of atomic systems with low-dimensional nanoantennas

Speaker
Karolina Slowik

Transition from Rabi Oscillations to Dynamic Interference seen in the Autler- Townes Doublet: A Multi-Peak Pattern Analysis

Speaker
Ayoub Ait Elarabi

RABBITT including Higher-Order Processes

Speaker
Hugo van der Hart

Driving and Imaging Achiral-to-Chiral Transitions in an All-Optical Setup

Speaker
Edward Binns

Light-Induced Losses and Pauli Suppression of Inelastic Collisions in a Sample of Trapped Bosonic Feshbach Molecules of ^{161}Dy^{40}K

Speakers
Luc Absil, Alberto Canali, Chun Kit Wong

Building scalable quantum computers at Oxford Ionics

Speakers
M. Krstajic, Dr R. Nourshargh

Landau polariton

Speaker
Farokh Mivehvar

Absolute quantum gravimeter and gradiometer for field applications

Speaker
Dr Taeg Yong Kwon

Mutual Neutralization with initial-state control

Speaker
Henning T Schmidt

Topological transport properties of height modulated subwavelength barrier lattices

Speaker
Giedrius Žlabys

Universal momentum tail of identical one-dimensional anyons with two-body interactions

Speaker
Mr Raúl Hidalgo Sacoto

Infrared absorption spectroscopy of single polyatomic molecular ions

Speaker
Zhenlin Wu

Bottom-up Analysis of Ro-Vibrational Helical Dichroism

Speaker
Mateja Hrast

Testing strong-field QED to second-order in highly correlated berylliumlike Pb^{78+} by electron-ion collision spectroscopy

Speaker
Stefan Schippers

Atomic data for Os VI spectral lines of interest to nuclear fusion research from independent computational approaches

Speaker
Maxime Brasseur

Vibrational Induced Molecular Magnetism: A Theoretical Perspective

Speaker
Matthias Diez

Scattering studies between metastable neon and aligned ND3

Speaker
Viet Le Duc

Energy loss function of samarium determined from the reflection electron energy loss spectroscopy spectra

Speaker
Karoly Tokesi

5:00 PM