Poster Session 1

Tuesday, June 3, 14:00-15:30

Poster #	Presenting author	Title
1	Young D. J., *JILA and University of Colorado, USA*	Exploring correlated hopping along a synthetic dimension in a strontium cavity QED system.
2	Heizenreder B., *Van der Waals-Zeeman Institute, University of Amsterdam, NL*	Towards continuous spectroscopy and superradiance.
3	Mishra D. K., *Department of Physics, Institute of Science, IN*	Enhanced Sensitivity of Coherent Anti-Stokes Raman Spectroscopy via SU(1,1) Interferometry.
4	Mondal S., *University of Birmingham, UK*	3D-Printed Optical Cavity for Laser Stabilization.
5	Wolf F., *QUEST Institute, PTB Braunschweig, DE*	Quantum logic control of transition metal and molecular ions.
6	Bednarski B., *Nicolaus Copernicus University in Toruń, PL*	Cavity-enhanced spectroscopy of H_2 in a deep cryogenic regime.
7	Sias C., *INRIM and LENS, IT*	Metastable two-dimensional Coulomb crystals.
8	Yadav P., *Indian Institute of Technology Delhi, IN*	High precision measurement of atom number in a mesoscopic cold atomic ensemble using fluorescence imaging.
9	Rasel E. M., *Leibniz Universität Hannover and Excellence Cluster Quantum Frontiers, DE*	Second-long light-pulse interferometry at pKs.
10	Zaheer A., *Optical Sciences Centre, Swinburne University of Technology, AU*	Discrete time crystals with bouncing potassium Bose-Einstein condensates.
11	Mouhanna H., *Laboratoire de Physique des Lasers, Université Sorbonne Paris Nord, FR*	High resolution spectroscopy of molecules confined in gas cells of sub-wavelength thickness.
12	Butery E., *Laboratoire de Physique des Lasers, Université Sorbonne Paris Nord, FR*	Spectroscopic measurements of the Rydberg-surface Casimir-Polder interaction.
13	Rosa-Medina R., *Atominstitut, Technische Universität Wien, AT*	Developing a quantum gas microscope with programmable lattices.

14	Cygan A., *Nicolaus Copernicus University in Toruń, PL*	Heterodyne cavity ring-down spectroscopy exploiting eigenmode frequencies for high-fidelity measurements.
15	Blondel C., *CNRS, FR*	The quantum offset of velocity imaging-measured electron energies.
16	Chen Y., *University of Science and Technology of China, CN*	Experimental demonstration of tunable spin-phonon coupling in trapped ions via optical tweezers.
17	Qiao M., *CNRS, FR*	Realization of a doped quantum antiferromagnet with dipolar tunnelings in a Rydberg tweezer array.
18	de Léséleuc S., *RIKEN/IMS, JP*	Measurement and feedforward correction of the fast phase noise of lasers.
19	Wang J., *Hefei National Laboratory, University of Science and Technology of China, CN*	Precision spectroscopy of CO for gas metrology.
20	Athanasakis-Kaklamanakis M., *Imperial College London, UK*	Towards a measurement of the electron's electric dipole moment with molecules in a lattice.
21	Chakraborty A., *Physical Research Laboratory, IN*	Probing nuclear spin-dependent parity-violation in ^{133}Cs using relativistic coupled-cluster theory.
22	Fouka K., *University of Amsterdam, NL*	Multilevel electromagnetically induced transparency cooling.
23	Robalo Pereira C., *Van der Waals-Zeeman Institute, University of Amsterdam, NL*	Optical tweezer optimisation for trapped-ion quantum simulation.
24	Baruzzo M., *INFN, IT*	Measurement of ground-state hyperfine splitting in muonic hydrogen: The FAMU experiment.
25	Gauguet A., *LCAR/FERMI, Université de Toulouse and CNRS, FR*	Optimal Floquet state engineering for large scale atom interferometers.
26	Richard J., *Exail Quantum Systems, FR*	Absolute quantum gravimetry in the field.
27	Ackerman Z.E.D., *Van der Waals – Zeeman Institute, University of Amsterdam, NL*	Quantum gates with trapped ions and optical tweezers.
28	Lei J.-Y., *Huazhong University of Science and Technology, CN*	Measuring G with atom interferometry.
29	Liu J., *Huazhong University of Science and Technology, CN*	Test of the gravitational redshift with single-photon-based atomic clock interferometers.
30	Yao Z., *CNRS, FR*	Microwave spectroscopy of ultracold sodium least-bound molecular states.
31	Filin D., *University of Delaware, USA*	Calculation of polarizabilities of low-lying states of silver.

32	Mun J., *Korea Research Institute of Standards and Science, KR*	Qubit control based on various transition lines of ^{171}Yb atoms in optical tweezers.
33	Morsch O., *CNR-INO and University of Pisa, IT*	Spatially resolved Rydberg Doppler thermometry of a cold gas.
34	Landru M., *ONERA DPHY - SLM, FR*	Multi-species cold-atom interferometry for inertial measurements.
35	Park S. E., *Korea Research Institute of Standards and Science, KR*	Improvement of short-term stability in a compact laser-cooled Rb atomic clock.
36	Fabre A., *Laboratory for Quantum Gases and Quantum Science and Engineering Center, CH*	Microscopy of density-wave ordering in strongly interacting Fermi gase.
37	Luo W., *University of Science and Technology of China, CN*	A ^{171}Yb-^{173}Yb cold-atom comagnetometer.
38	Chen S., *PTB Braunschweig, DE*	Excited-state magnetic properties of carbon-like calcium Ca^{14+}.
39	Mukherjee R., *Sarala Birla University, IN*	Enhancement of Kerr nonlinearity in quantum dot molecules via tunneling mechanism.
40	Quensen M., *Deutsches Zentrum für Luft- und Raumfahrt e.V., DLR-SI, DE*	Hong-Ou-Mandel interference of more than 10 indistinguishable atoms.
41	Valencia G., *Institute of Science and Technology Austria (ISTA), AT*	Towards quantum limited milligram scale optomechanics.
42	Kristensen, S. L., *Max-Planck-Institute for Quantum Optics, DE*	Precision spectroscopy of ^{88}Sr with direct readout of the ^3P_n metastable states.
43	Masuda T., *Research Institute for Interdisciplinary Science, Okayama University, JP*	Laser spectroscopy of the Th229 nuclear clock transition.
44	Kwong C. C., *Nanyang Technological University, SGP*	Measurement of 477 nm magic wavelength for strontium clock transition.
45	Gavryusev V., *University of Florence, IT*	Optimal control in phase space applied to minimal-time transfer of thermal atoms in optical traps.
46	Biagioni G., *Université Paris-Saclay, Institut d'Optique Graduate School, CNRS, FR*	Collective light scattering in ordered 1D chains of dysprosium atoms.
47	Curtis E. A., *National Physical Laboratory, UK*	A highly accurate $^{171}Yb^+$ ion optical clock at NPL for metrology and tests of fundamental physics.

48	Arnold A.S., *Dept. of Physics, University of Strathclyde, UK*	Single-beam grating-chip 3D and 1D optical lattices.
49	Wolf N., *Institute of Applied Physics, University of Bonn, DE*	Bose-Einstein condensation of photons in variable potentials.
50	Cui J.-M., *University of Science and Technology of China, CN*	Trapped-ion electric noise spectrum analyzer assisted by optical tweezers.
51	Ajayakumar A., *CERN, CH*	High resolution laser spectroscopy towards exotic lanthanide and actinide isotopes for nuclear physics.
52	Park Y.-H., *Korea Research Institute of Standards and Science, KR*	Cavity design simulation to reduce cavity-related errors in atomic fountain clocks.
53	Parke A. L., *National Physical Laboratory (NPL),UK*	Long optical cavity storage time and active RAM cancellation towards frequency stabilisation at 1×10^{-18}.
54	Schioppo M., *National Physical Laboratory (NPL), UK*	Ultrastable lasers at NPL with fractional frequency instability below 10^{-16}.
55	Dubois L., *EPFL, CH*	A cavity-microscope for micrometer-scale control of atom-photon interactions.
56	Gajda M., *Institute of Physics, Polish Academy of Sciences, PL*	Bell correlations with multicomponent Bose-Einstein condensates.
57	Nosske I., *PTB Braunschweig, DE*	Transportable strontium optical lattice clock for geodesy at the few-cm height level.
58	Jyoti A., *Institute of Quantum Electronics, School of Electronics, Peking University, CN*	Magic wavelengths for ^{85}Rb and ^{133}Cs atoms based active optical clocks in visible-near infrared spectrum.
59	Pupic A., *Institute of Science and Technology, Klosterneuburg, AT*	Towards a spin-squeezing-enhanced atom interferometer in an optical cavity.
60	Famà F., *INRIM, IT*	Silicon Nitride microresonators for narrowband entangled photon-pair generation.

Poster Session 2

Wednesday, June 4, 14:00-15:30

Poster #	Presenting author	Title
61	Tang Z. M., *East China Normal University, CN*	Study on the clock-line sideband cooling of Yb atoms.
62	Zhang T., *East China Normal University, CN*	ECNU Yb optical lattice clocks with both instability and systematic uncertainty below 5×10^{-18}.
63	Cimmino R. T., *Harvard University, USA*	A dual-species optical tweezer array of Na and Cs Rydberg atoms.
64	Lee S.-B., *Korea Research Institute of Standards and Science, KR*	Uncertainty evaluation of KRISS-AGRb-1 and development status of new atomic gravimeter toward the accuracy of below 10 nm/s^2.
65	Wirth V., *ETH Zurich, CH*	Precision spectroscopy of the fine-structure in the $a^3\Sigma_u^+(v = 0)$ and $c^3\Sigma_g^+(v = 4)$ states of the helium dimer.
66	Battelier B., *LP2N, Université de Bordeaux, IOGS and CNRS , FR*	All optical ultracold atoms in microgravity.
67	Qiu L., *Max Planck Institute of Quantum Optics, DE*	A high-data-rate fermionic quantum simulator in optical lattices.
68	Fang S.-C., *National Sun Yat-Sen University, TWN*	Measuring external electric fields using Stark and Zeeman effects in Rydberg-EIT vapor cells.
69	Manzoor S., *Università degli Studi di Firenze, IT*	Precision spectroscopy and frequency determination of the hyperfine components of the P(63) 4-4 transition of molecular iodine near 652 nm.
70	Heier J., *Leibniz Universität Hannover, DE*	Collisions in a quantum gas of bosonic ^{23}Na^{39}K molecules.
71	Giardini V., *University of Florence, IT*	Single strontium atoms in optical tweezer arrays for quantum simulation.
72	Cline J. R. K., *Quantinuum, USA*	Towards scalable trapped-ion quantum computing.
73	Abraham J.J., *University of Southampton, UK*	Development of a compact cold atom interferometric rotation sensor.
74	Piest B., *Observatoire de Paris, Université PSL, FR*	Implementation of Delta-Kick squeezing in an atom interferometer.
75	Pal M., *Graz University of Technology, AT*	Performance comparison of dual comb dpectrometers with MHz and GHz repetition rate.
76	Oghittu L., *University of Amsterdam, NL*	Confinement induced resonances in alkali-alkaline earth atom mixtures.

77	Blume D., *University of Oklahoma, USA*	Laser-pulse induced helium trimer dynamics.
78	Lecomte M., *Sorbonne Université, FR*	Production and stabilization of a spin mixture of ultracold dipolar Bose gases.
79	Dinesan H., *Université Paris-Saclay, CNRS, FR*	A portable, cost-efficient microwave spectrometer and its application to Matrix isolation spectroscopy for searching physics beyond the standard model.
80	Herrera-Sancho O.A., *Universität Stuttgart, DE, and Universidad de Costa Rica, CR*	A high-resolution ion microscope to spatially observe ion-Rydberg interactions.
81	Milani G., *Leonardo Innovation Hub - Quantum Technologies, IT*	Progress on cold-atoms based quantum atomic clocks at Leonardo Innovation Hub.
82	Jenkins R., *Imperial College London, UK*	Measuring the electron's electric dipole moment using ultracold YbF molecules.
83	Roe T.H., *University of Southampton, U.K.*	A momentum state quantum computer.
84	Castrillo A., *University of Campania, IT*	Comb-locked cavity ring-down spectroscopy: combining high precision with ultra-high detection sensitivity in molecular interrogation.
85	Marchesini M., *CNRS, FR*	Ultra-cold atoms interferometry for space applications.
86	Rattanasakuldilok W., *University of Jyväskylä, Finland,*	Ultracold caesium radioisotopes and isomers for nuclear magnetic octupole moment studies.
87	Yamamoto S., *Okayama University, JP*	First observation of Muonium 1S-2S F=0 $\rightarrow$ F'=0 transition at J-PARC.
88	Tariq M., *Max-Planck-Institut, DE*	How to generate XUV frequency combs without enhancement resonators?
89	Lee S., *Korea Research Institute of Standards and Science and Chonnam National University, KR*	Highly stable compact optical frequency standard based on modulation transfer spectroscopy on the ^{87}Rb D_2 Line.
90	De Natale P., *CNR-INO and LENS, IT*	Saturated-absorption Cavity Ring-down (SCAR) Spectroscopy: exploring the limits of sensitivity and precision for molecular detection.
91	Roschinski S., *TU Wien, Atominstitut, AT*	Towards entanglement generation in a cavity coupled atomic array.
92	Huang D.-Y., *University of Science and Technology of China, CN*	Ultrafast high-fidelity state readout of single neutral atom.
93	Valtolina G., *Fritz-Haber-Institut der Max-Planck-Gesellschaft, DE*	Towards a quantum gas with multiple long-range interactions.
94	Humphreys B., *University of Durham, UK*	Zeeman-Sisyphus deceleration of CaF molecules.

95	Favier M., *National Physical Laboratory, UK*	Improving optical lattice clock stability with Dick-noise-free architectures.
96	De Natale P., *CNR-INO and LENS, IT*	Mid infrared semiconductor lasers between classical and quantum operation regime.
97	Gozzellino M., *INRIM, IT*	Exploiting the light-shift for laser stabilization in atomic clocks.
98	Sun X., *NPL, UK*	High-precision optical frequency measurements: supporting UK industry and academia at NPL.
99	Baur D., *Institute for Quantum Electronics, Eidgenössische Technische Hochschule Zürich, CH*	Bandstructure of a coupled BEC-cavity system: effects of dissipation and geometry.
100	Kang S., *Korea Research Institute of Standards and Science, KR*	Laser frequency reference with a micro-fabricated Rubidium vapor cell for Doppler-free saturated absorption spectroscopy.
101	Miller C., *JILA, NIST & University of Colorado Boulder, USA*	Exploring spin-motion models with a quantum gas of polar molecules.
102	Kocik R.R., *Institute for Molecular Science, National Institute of Natural Sciences, JP*	Sub-nanosecond 780 nm pulse generation from a continuous wave laser for ultrafast hyperfine-resolved Rydberg excitation.
103	Zhou X., *Peking University, CN*	Realizing a spatially correlated lattice interferometer.
104	Spreeuw R.J.C. *University of Amsterdam,NL*	Parallel rearrangement of single atoms with an SLM for quantum simulation.
105	Preston.A., *University of Southampton, UK*	A compact quantum inertial sensor using atom interferometry.
106	Marinelli M., *University of Trieste, CNR-IOM, IT*	Ultrafast imaging of ytterbium tweezer arrays.
107	Jiang M., *Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences, CN*	Robust, rapid laser autolocking with compact radio frequency generators for laser pulse sequencing in field-deployable atom interferometers.
108	Mamat, B. *Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences, CN*	Mitigating residual electric field noise to enhance the coherence of Rydberg atoms.
109	Natale G., *ETH Zürich, CH*	Mode synchronization in a quantum gas with cavity-mediated interactions.
110	Lienhard V. *Institute for Molecular Science, National Institutes of Natural Sciences, JP and Universidad de Oviedo, ES*	Generation of motional squeezed states for neutral atoms in optical tweezers.

111	Martinez-Lahuerta V.J., *Leibniz University Hannover, Institute of Quantum Optics, DE*	Robust Bragg diffraction for atom interferometers using optimal control theory.
112	Poli N., *Dipartimento di Fisica e Astronomia & LENS, Università degli Studi di Firenze, IT*	Progress towards atom interferometry using large momentum transfer UV transitions in ultra-cold cadmium.
113	Huang M.-Z., *ETH Zurich, CH*	Entropy transport between strongly interacting superfluids.
114	Jiang J., *PTB Braunschweig, DE*	High-resolution spectroscopy of $^{173}Yb^{+}$ ions.
115	Gao K., *Chinese Academy of Sciences, CN*	Precision spectroscopy and nuclear structure parameters in $^{7}Li^{+}$ ion.
116	Wilson J.D., *JILA & Department of Physics, University of Colorado Boulder, USA*	Universal gate set for optical lattice based atom interferometry.
117	Salvatierra J.P., *Politecnico di Torino, IT*	Current advances in the strontium optical lattice clock and development of a cavity-enhanced system at INRiM.
118	Robert P., *Dipartimento di Fisica e Astronomia and LENS, Università degli Studi di Firenze, IT*	Optically dressed three-level coherence in neutral bosonic alkaline-earth-like species.
119	Gaudout S., *Laboratoire Kastler Brossel, Sorbonne Université, CNRS, FR*	Probing the local dispersion of k-vectors in situ with a Bose-Einstein Condensate.
120	Lombardi P., *CNR-INO, IT*	A new machine for many-body physics investigation with dipolar quantum gases.

Poster Session 3

Friday, June 6, 14:00-15:30

Poster #	Presenting author	Title
121	Wunderlich Ch., *University of Siegen, DE*	Fast, robust and laser-free universal entangling gates for trapped-ion quantum computing.
122	Hillberry L.E., *JILA and the University of Colorado, USA*	High phasespace density of YO molecules.
123	Zhang C., *The University of Tokyo, JP*	Investigation of isotope shifts and Stark shifts in the strontium Rydberg state via $5s^2\ {}^1S_0 \rightarrow 5s5p\ {}^1P_1^0 \rightarrow 5p_{1/2}5p_{1/2} \rightarrow 4d_{3/2}nl_j (n^* = 39.4)$.
124	Schmid F., *ETH Zürich, CH*	Quantum logic spectroscopy of the hydrogen molecular ion.
125	Pargoire Y., *Université Sorbonne Paris Nord, FR*	Continuous-wave superradiant laser based on a continuous cold atomic beam.
126	Zhuang J., *Innovation Academy for Precision Measurement Science and Technology, CN*	Probing the interaction energy of two ^{85}Rb atoms in an optical tweezer via spin-motion coupling.
127	Corgier R., *LTE, Observatoire de Paris, FR*	Squeezing-enhanced accurate differential sensing under large phase noise.
128	Robinson-Tait J., *NNF Quantum Computer Programme, University of Copenhagen, DNk*	The spectroscopic investigation of carbon clusters in a thermal source.
129	Eriksen, A.S., *NNF Quantum Computer Programme, University of Copenhagen, DNK*	Optical cooling and trapping of germanium.
130	Gaaloul N., *Leibniz University of Hanover, Institute of Quantum Optics, DE*	Quantum sensing in space for fundamental physics and Earth observation.
131	Beller T., *University of Florence, IT*	Programmable arrays of Rydberg Ytterbium atoms for quantum computing.
132	Sanner C., *Colorado State University, USA*	Zero-contrast clock interferometry.
133	Goti I., *INRIM, IT*	Operation of Yb optical lattice clock at sub-μK atomic temperature and international clock comparisons.
134	Beck H., *Humboldt University Berlin, DE*	Status of the laser system for cold atom experiments in BECCAL onboard the ISS.
135	Sowiński T., *Institute of Physics, Polish Academy of Sciences, PL*	Three-component few-fermion mixtures in one-dimensional geometry.

136	Houwman J.J.A., *Universität Innsbruck, AT*	Fano-shaped Feshbach resonances in ultracold dipolar spin mixtures.
137	Schäffer S. A., *University of Copenhagen, DNK*	Photon statistics in a steady-state superradiant laser.
138	Singh S. K., *Laboratoir Kastler Brossel, Sorbonne Universite, FR*	Paraxial quantum fluid of light in cold atomic cloud.
139	Moreau G. L., *Stanford University, California, USA,*	Spin squeezing in an array of atomic ensembles via Rydberg dressing.
140	Rodewald J., *Imperial College London, UK*	Progress towards a new search for time-variation of the proton-to-electron mass ratio with a molecular lattice clock.
141	Gravina S., *University of Campania, IT*	Isotope shift spectroscopy in mercury vapors.
142	Gómez-Fernández L., *Niels Bohr Institute and Københavns Univsersitet, DNK*	Hyperfine structure of the aluminum atom.
143	Lannig S., *JILA and University of Colorado, USA*	Spectrally tailoring a clock laser for quantum state engineering and many-body physics in a 3D lattice clock.
144	Hahn R., *CNRS, Université Sorbonne Paris Nord, FR*	High precision mid-infrared vibrational spectroscopy with cold molecules.
145	Kjær J.K., *University of Copenhagen, DNK*	Laser cooling and trapping of silicon atoms.
146	Wattellier S., *Laboratoire Kastler Brossel, Sorbonne University, FR*	Superfluid fraction in an interacting spatially modulated Bose-Einstein condensate.
147	Cominotti R., *CNR-INO, IT*	False vacuum decay at finite temperatures in ferromagnetic superfluids.
148	Nauk C., *PTB Braunschweig, DE*	Recent advances of PTB's transportable Al^+ ion clock.
149	Mandopoulou G. E., *Harvard University, Cambridge, USA*	Photonic interfaces for telecommunication-band quantum networking with neutral atoms.
150	Riley P. S., *University of Colorado Boulder and NIST USA,*	Evanescent light-matter interaction in an integrated MEMS-nanophotonic vapor cell.
151	Ho M., *Stanford University, Stanford, CA, USA*	Cavity-mediated programmable interactions for quantum metrology and simulation.
152	Donati L., *CNR and LENS, IT*	Exploring noise-induced Fano coherence in a hot vapor atomic gas.
153	Fan M., *University of Toronto, CAN*	Ultra-wideband search for axionlike dark matter using precision spectroscopy of octupole-enhanced nuclei in a crystal.

154	Vinelli G., *University of Firenze, IT*	Advancing anti-matter-wave interferometry: design and implementation of techniques for gravity measurements on positronium atoms.
155	Lindsay M. D., *United States Air Force Academy, USA*	Progress on measuring the $\|\alpha/\beta\|$ transition polarizability ratio in the one photon Rb 5S - 6S transition.
156	Bond L. J., *University of Amsterdam, NL*	Quantum-enhanced sensing with spin-dependent squeezing.
157	Mancini C., *INFN, IT*	Towards a squeezed interferometer with strontium atoms in a high-finesse cavity.
158	Xia T., *Sorbonne Université, FR*	Towards non-destructive microwave detection of magnetically guided ultracold atoms.
159	Mahapatra S., *Sorbonne Université, FR*	Towards a strong coupling regime in Waveguide QED using slow-mode photonic crystal waveguide and cold Rb atoms.
160	Meyroneinc A., *Université Sorbonne Paris Nord, FR*	Dissipative spin manipulation in a SU(N)-symmetric Fermi gas.
161	Pelini J., *CNR-INO and LENS, IT*	Exploiting high-sensitivity and resolution in cavity-enhanced photoacoustic sensors.
162	Hutchinson D. A. W., *Univeristy of Otago, NZL*	The Anderson transition in a symplectic two-dimensional ultracold gas.
163	Burden A., *NPL, UK*	Measurement validation and cycle slip detection on a single optical frequency comb.
164	Lien Y.-H., *University of Birmingham, UK*	Development of a high-bandwidth atom interferometer for gravity sensing.
165	Fricke J. F., *ETH Zurich, CH*	Spin- and Momentum-Correlated Atom Pairs Mediated by Photon Exchange and Seeded by Vacuum Fluctuations.
166	Ciuryło R., *Nicolaus Copernicus University, Toruń, PL*	Ultra-cold Hg atoms for sensing fundamental physics.
167	Ciuryło R., *Nicolaus Copernicus University, Toruń, PL*	Isotopic effect on optical clock transition affected by cold atoms collisions.
168	Chiofalo M. L., *Department of Physics "Enrico Fermi" and INFN, University of Pisa, Pisa, IT*	A quantum model for numerosity perception.