



# Physics of fundamental Symmetries and Interactions - PSI2022

## Monday, 17 October 2022

### Session - WHGA/001 - Auditorium (09:00 - 10:35)

-Conveners: Toshinori Mori

time	[id] title	presenter
09:00	[324] Welcome	KIRCH, Klaus
09:05	[203] The high-intensity muon beam (HIMB) project at PSI	KNECHT, Andreas
09:35	[213] COMET - mu-e conversion search at J-PARC	COLLABORATION, COMET MIHARA, Satoshi
10:05	[181] The Search for Charged Lepton-Flavour Violation with the Mu3e Experiment	WAUTERS, Frederik

### Session - WHGA/001 - Auditorium (11:05 - 12:35)

-Conveners: Dieter Ries

time	[id] title	presenter
11:05	[196] Constraining CP violation within effective field theories	STOFFER, Peter Matthias
11:35	[201] EDM searches in atoms and molecules: an overview	VUTHA, Amar
12:05	[179] An Overview of the n2EDM Experiment at PSI	THORNE, Jacob

### Session - WHGA/001 - Auditorium (14:00 - 16:00)

-Conveners: Marie-Cécile Piro

time	[id] title	presenter
14:00	[318] Recent activities of the Nuclear and Particle Physics group of the ILL	Dr JENTSCHEL, Michael
14:30	[207] Testing QED and Beyond with Exotic Atoms	PAUL, Nancy
15:00	[225] Zero-Field and High-Field Precision Measurements of Muonium Hyperfine Structure at J-PARC	NISHIMURA, Shoichiro
15:30	[194] The Mu-MASS experiment at PSI: Current status and latest results	CRIVELLI, Paolo

### Session - WHGA/001 - Auditorium (16:30 - 18:00)

-Conveners: Tsutomu Mibe

time	[id] title	presenter
16:30	[243] MUSE, the MUon proton Scattering Experiment	DOWNIE, Evangeline
17:00	[326] MUSE, the muon science facility in MLF J-PARC	KAWAMURA, Naritoshi
17:20	[274] New Measurements of Muonic Helium Atom Hyperfine Structure at J-PARC MUSE	STRASSER, Patrick
17:40	[199] Muonic atom spectroscopy with radioactive targets	VOGIATZI, Stergiani Marina

# Tuesday, 18 October 2022

## Session: PSI2022- FIPS@CERN Joint Session - WHGA/001 - Auditorium (09:00 - 10:30)

-Conveners: Philipp Schmidt-Wellenburg

time	[id] title	presenter
09:00	[287] The Neutron Lifetime puzzle and the Latest Results of the UCNtau Experiment	Prof. LIU, Chen-Yu
09:30	[188] The neutron decay problems and new physics	BEREZHIANI, Zurab
10:00	[202] Neutron EDM Searches	MARTIN, Jeffery

## Session: PSI2022 - FIPS@CERN Joint Session - WHGA/001 - Auditorium (11:00 - 12:00)

-Conveners: Malte Hildebrandt

time	[id] title	presenter
11:00	[306] The Fermilab Muon g-2 Experiment: Status and Outlook	CORRODI, Simon
11:30	[339] The MEGII experiment and exotic searches	PAPA, Angela

## Session: FIPS@CERN - PSI Joint Session - WHGA/001 - Auditorium (13:30 - 16:00)

-Conveners: Georg Bison

time	[id] title	presenter
13:30	[327] Overview of EDM experiments	FLAMBAUM, Victor
14:00	[328] Precision measurements of the fine structure constant	CLADÉ, Pierre
14:30	[329] Novel approaches to GW detection (atom interferometry)	BUCHMULLER, Oliver
15:00	[330] Search for ultra-light FIPs with clocks & cavities	YE, Jun
15:30	[331] Ultra-light FIPs: the FIP Physics Centre approach	POSPELOV, Maxim

# Wednesday, 19 October 2022

## Session - WHGA/001 - Auditorium (09:00 - 10:40)

-Conveners: Tobias JENKE

time	[id] title	presenter
09:00	[317] Atomic clocks, precision measurements and tests of the Standard Model	MEHLSTÄUBLER, Tanja E.
09:30	[260] Recent Developments in Beam Neutron Lifetime Experiments	WIETFELDT, Fred
10:00	[271] qBounce: Using GRS to investigate bouncing neutrons on mirrors	MICKO, Jakob
10:20	[223] Towards a neutron electric dipole moment measurement with an advanced ultracold neutron source at TRIUMF	Dr HIGUCHI, Takashi

## Session - WHGA/001 - Auditorium (11:10 - 13:00)

-Conveners: Satoshi Mihara

time	[id] title	presenter
11:10	[334] Overview and new results H2 molecular spectroscopy	MERKT, Frederic
11:40	[197] Hadronic contributions to the anomalous magnetic moment of the muon	HOFERICHTER, Martin
12:10	[195] High-precision Penning-trap experiment PENTATRAP	ELISEEV, Sergey
12:40	[222] LUXE: A new experiment to study non-perturbative QED in electron-laser and photon-laser collisions	FLECK, Kyle

## Session - WHGA/001 - Auditorium (14:30 - 16:10)

-Conveners: Michael Jentschel

time	[id] title	presenter
14:30	[340] The LEMING experiment	SOTER, Anna Prof. SOTER, Anna SOTER, Anna SOTER, Anna
15:00	[204] Proton structure in and out of muonic hydrogen	HAGELSTEIN, Franziska
15:30	[275] Progress Towards the Development of the nEDM@SNS Experiment	PLASTER, Brad
15:50	[305] The neutron electric dipole moment experiment at Los Alamos National Laboratory	WONG, Douglas

## Session - WHGA/001 - Auditorium (16:40 - 18:10)

-Conveners: Kenji Mishima

time	[id] title	presenter
16:40	[180] B anomalies and Lepton Flavour Universality	SMITH, Eluned
17:10	[215] Latest results and precision measurements with NA62	MARCHEVSKI, Radoslav
17:30	[183] Searching for the permanent electric dipole moment using laser cooled francium atoms	Dr NAGAHAMA, Hiroki
17:50	[285] BRAND – search for exotic couplings in weak interactions using the transverse electron polarization in the decay of free neutrons	BODEK, Kazimierz

# Thursday, 20 October 2022

## Session - WHGA/001 - Auditorium (09:00 - 10:40)

-Conveners: Claude Amsler

time [id]	title	presenter
09:00	[314] Why do we want to search for a muon EDM ?	CRIVELLIN, Andreas
09:30	[178] Muon g-2 and EDM at J-PARC	MIBE, Tsutomu
10:00	[316] MuSun: Muon Capture on the Deuteron	KAMMEL, Peter
10:20	[268] Hyperfine Structure Measurements on Hydrogen and Deuterium for CPT and Lorentz Invariance tests	SIMON (FOR THE ASACUSA COLLABORATION), Martin

## Session - WHGA/001 - Auditorium (11:10 - 12:50)

-Conveners: Torsten Soldner

time [id]	title	presenter
11:10	[313] New Searches for Neutron Oscillations at ORNL	BROUSSARD, Leah
11:40	[245] Search for neutron disappearance into sterile states	RIENÄCKER, Ingo
12:00	[216] Neutron beta decay with pulsed cold neutron beams	MÄRKISCH, Bastian
12:30	[250] Reanalysis of the of $\beta-\bar{\nu}_e$ angular correlation measurement aSPECT with new constraints on Fierz interference	SCHMIDT, Ulrich

## Session - WHGA/001 - Auditorium (14:30 - 15:50)

-Conveners: Sacha Davidson

time [id]	title	presenter
14:30	[208] Update on the PEN experiment: A precision measurement of rare pion decays	Dr GLASER, Charles
15:00	[315] Overview of Pieno results and the PIONEER project	MALBRUNOT, Chloe MALBRUNOT, Chloé
15:30	[220] The Mu2e experiment	DI FALCO, Stefano

## Session - WHGA/001 - Auditorium (16:20 - 18:00)

-Conveners: Kazimierz Bodek

time [id]	title	presenter
16:20	[182] Dark matter: the hunt for the unknown	PIRO, Marie-Cécile
16:50	[211] Dark sector studies with the PADME experiment	DOMENICI, Danilo
17:10	[304] Discovering Neutrinoless Double-Beta Decay in Ge-76 with the LEGEND Experiment	REDCHUK, Mariia
17:30	[187] Search for Neutrinoless Double Beta Decay of $^{130}\text{Te}$ : latest results from the CUORE experiment	GHISLANDI, Stefano

# Friday, 21 October 2022

## Session - WHGA/001 - Auditorium (09:00 - 10:40)

-Conveners: Aldo Antognini

time	[id] title	presenter
09:00	[198] Physics program at MESA in Mainz	BERGER, Niklaus
09:30	[297] New Limit on Axion-Like Dark Matter using Cold Neutrons	Mr SCHULTHESS, Ivo
09:50	[240] The Search for Neutron - Anti-Neutron Oscillations at the European Spallation Source	Mr WAGNER, Richard
10:10	[217] Direct neutrino mass measurements	WIESINGER, Christoph

## Session - WHGA/001 - Auditorium (11:10 - 12:35)

-Conveners: Peter Kammel Kammel

time	[id] title	presenter
11:10	[309] Cyclotron radiation emission spectroscopy for neutrino mass measurement and exotic interaction searches	FERTL, Martin
11:30	[319] Studies of Exotic Physics with Antiprotons and Protons	ULMER, Stefan
12:00	[332] Spectroscopic and Gravitational studies of antimatter: the ALPHA antihydrogen experiment at CERN	HANGST, Jeffrey
12:30	[333] Farewell	