



# Annual meeting of the Swiss Physical Society 2018

## Wednesday 29 August 2018

### Nuclear, Particle- & Astrophysics (TASK): I: High Energy Physics I - CE 3 (13:30 - 15:45)

time [id] title	presenter
13:30 [101] □301□ Lepton Flavour Violation searches at LHCb	ANDREASSI, Guido
13:45 [129] □302□ Lepton flavour universality tests in semileptonic b-quark decays	Dr BUONAURA, Annarita
14:00 [115] □303□ Tests of Lepton flavour universality in $b \rightarrow s \ell^+ \ell^-$ decays at LHCb	GRAVERINI, Elena
14:15 [94] □304□ Anatomy of $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ decays and prospects for NP	MAURI, Andrea
14:30 [153] □305□ Flavour anomalies	PUIG NAVARRO, Albert
15:00 [56] □306□ Search for ttH(bb) in the all-hadronic channel	SCHWEIGER, Korbinian
15:15 [144] □307□ Search for direct top squark pair production in events with a Higgs or Z boson, and missing transverse momentum with the ATLAS detector	MERLASSINO, Claudia
15:30 [170] □309□ A search for bottom squarks in decay chains involving the Higgs boson with the ATLAS Detector	WESTON, Thomas

### Nuclear, Particle- & Astrophysics (TASK): II: High Energy Physics II - CE 3 (16:30 - 18:30)

time [id] title	presenter
16:30 [8] □311□ Evidence for the Higgs boson produced in association with a Z or W boson, where H decays to b-bbar and the Z/W to leptons.	PERRIN, Gael Ludovic
16:45 [86] □312□ Combined Time-Dependent CP Violation Measurements by the B factory experiments BaBar and Belle	ROEHRKEN, Markus
17:00 [12] □313□ Search for CP violation in the charm sector through an amplitude analysis of $D^0 \rightarrow K^+ K^- \pi^+ \pi^-$ decays at LHCb	SCHUBIGER, Maxime
17:15 [160] □314□ Dimensional mismatch theories and confinement	BARROS, Joao
17:30 [271] □315□ Hadron Physics from Lattice Simulations	BIETENHOLZ, Wolfgang
17:45 [29] □316□ Overview of very rare decays at LHCb	PESCATORE, Luca
18:00 [63] □317□ First steps towards the experimental observation of purely baryonic decay processes using the LHCb detector.	MACKO, Vladimir
18:15 [167] □318□ Photon polarisation in radiative $b\bar{b}$ -hadron decays at LHCb	BELLEE, Violaine

# Thursday 30 August 2018

## Nuclear, Particle- & Astrophysics (TASK): III: Accelerator Physics & Technology I - CE 6 (14:00 - 16:30)

time	[id] title	presenter
14:00	[272] □321□ The Compact Linear Collider (CLIC): High Precision Physics beyond the HL-LHC	ELSENER, Konrad
14:30	[273] □322□ The landscape of Future Circular Colliders	BLONDEL, Alain
15:00	[212] □323□ The PSI Canted-Cosine-Theta Technology Program for FCC	AUCHMANN, Bernhard
15:15	[205] □324□ Quench Protection of CCT-type High-field Magnets for Accelerators	Ms GAO, Jiani
15:30	[204] □325□ Production of the first 1-m long Canted-Cosine-Theta (CCT) model magnet at PSI	MONTENERO, Giuseppe
15:45	[173] □326□ Beam-Beam studies for Future Circular Colliders	PIELONI, Tatiana
16:00	[113] □327□ Transverse beam stability and Landau damping at LHC and FCC	TAMBASCO, Claudia
16:15	[165] □328□ Machine learning applications for Hadron Colliders: LHC lifetime optimization and designing Future Circular Collider	COYLE, Loic Thomas

## Nuclear, Particle- & Astrophysics (TASK): V: Dark Matter & Astrophysics - CE 3 (14:00 - 16:15)

time	[id] title	presenter
14:00	[68] □341□ Search for inelastic WIMP-nucleus scattering with XENON1T	Mr BROWN, Adam
14:15	[70] □342□ Simulations and Background predictions for DARWIN	Ms BIONDI, Yanina
14:30	[88] □343□ New Results from the XENON1T Dark Matter Experiment	CAPELLI, Chiara
14:45	[99] □344□ DARWIN: the ultimate dark matter detector	Dr SANCHEZ-LUCAS, Patricia
15:00	[223] □345□ The Progress of ArDM Experiment	MU, Wei
15:15	[59] □346□ Highlights of the FACT TeV monitoring program	Mr ARBET-ENGELS, Axel
15:30	[134] □347□ FACT - Robotic Monitoring at TeV Energies	NEISE, Dominik
15:45	[151] □348□ The SST-1M camera prototype performances and calibration for the CTA SST-1M Project	ALISPACH, Cyril Martin
16:00	[226] □350□ FIT: The Fiber Tracker for the HERD Facility	Dr PERRINA, Chiara

## Nuclear, Particle- & Astrophysics (TASK): IV: Accelerator Physics & Technology II - CE 6 (17:00 - 18:15)

time	[id] title	presenter
17:00	[127] □331□ Linearised dynamical model for electron cloud induced instabilities	BUFFAT, Xavier
17:15	[154] □332□ Electron-ion dynamics and fast instabilities in the LHC	METHER, Lotta
17:30	[72] □333□ muCool : Development of ultra-cold high-brightness muon beam line	IWAI, Ryoto
17:45	[98] □334□ The development of a high brightness muonium beam	RITJOHO, Narongrit
18:00	[108] □335□ Development of Fast Timing Silicon Monolithic Pixel Sensors and Image Reconstruction for Positron Emission Tomography	HAYAKAWA, Daiki

**Nuclear, Particle- & Astrophysics (TASK): VI: Neutrinos & Low Energy Physics - CE 3 (17:00 - 19:00)**

time	[id] title	presenter
17:00	[74] □351□ First evidence of a flaring neutrino source and scan of the full sky	CARVER, Tessa Lauren
17:15	[11] □352□ Measurement of neutrino interactions in the T2K near detector	MARET, Lucie Violette
17:30	[93] □353□ Search for neutrinoless double beta decay beyond $10^{26}$ yr of half life sensitivity with GERDA	MINGAZHEVA, Rizalina
17:45	[186] □354□ First results from the 3x1x1 m <sup>3</sup> dual phase Liquid Argon Time Projection Chamber prototype at CERN	SCHLOESSER, Caspar Maria
18:00	[215] □355□ The proposed SHiP experiment	RODRIGUES CAVALCANTE, Ana Barbara REDI, Federico Leo
18:15	[24] □356□ Investigating the solid deuterium in the PSI UCN source moderator	Mr HILD, Nicolas
18:30	[47] □357□ Muonic Atom Spectroscopy: Preparations Regarding a Measurement of the Charge Radius of Radium	SKAWRAN, Alexander Albert
18:45	[92] □358□ Laser System for the Measurement of the Ground-State Hyperfine Splitting in Muonic Hydrogen	ZEYEN, Manuel

# Friday 31 August 2018

## Nuclear, Particle- & Astrophysics (TASK): VII: Detector & Reconstruction - CE 3 (11:15 - 13:15)

time [id]	title	presenter
11:15 [4] □361□ Performances of the upgraded CMS pixel detector		RAUCO, Giorgia
11:30 [178] □362□ Optoboard Development for the Inner Tracker of the High Luminosity ATLAS Detector		FEHR, Armin
11:45 [32] □363□ Deep neural network based simultaneous b-jet energy correction and resolution estimator		CHERNYAVSKAYA, Nadezda
12:00 [67] □364□ Real-time track reconstruction for the ATLAS HL-LHC		POGGI, Riccardo
12:15 [84] □365□ Deep Neural Networks for signal/background classification in associated Higgs production with a vector boson decaying into a b-bbar quark		BERGER, Pirmin
12:30 [107] □366□ CMS detector simulation tuning through machine learning		REITENSPIESS, Thomas
12:45 [117] □367□ Reconstruction improvements and model extensions of the ATLAS SUSY search in multijet plus missing transverse momentum final state.		VALENTE, Marco
13:00 [140] □368□ Tuning the simulated response of the CMS detector to b-jets using Machine learning algorithms.		GEDIA, Krunal Bipin