



# Joint annual meeting of Swiss and Austrian Physical Societies 2017

## Wednesday, 23 August 2017

### Nuclear, Particle-and Astrophysics (TASK-FAKT): I: Opening Session - Room 2 (14:00 - 16:30)

time	[id] title	presenter
14:00	[444] □301□ CHIPP Award Winner	GRAMLING, Johanna
14:25	[33] □302□ Effective mass signatures in multiphoton pair production	KOHLFÜRST, Christian
14:50	[320] □303□ Status of the International Future Circular Collider Study	BENEDIKT, Michael
15:10	[333] □304□ AWAKE, the Proton Driven Plasma Wakefield Acceleration Experiment at CERN	Dr GSCHWENDTNER, Edda
15:30	[445] □305□ Physics at the HL-LHC	DISSERTORI, Günther
15:50	[446] □306□ CTA experiment	STRAUMANN, Ueli
16:10	[447] □307□ Precision Experiments with Cold and Ultracold Neutrons	Prof. ABELE, Hartmut

### Nuclear, Particle-and Astrophysics (TASK-FAKT): III: Detectors I - Room 3 (17:00 - 19:00)

time	[id] title	presenter
17:00	[297] □321□ Modeling of the detector response in $\mathcal{H} \rightarrow \gamma \gamma$ differential cross section measurements at CMS	ANDREJKOVIC, Janik Walter
17:15	[143] □322□ Improving sensitivity to jetty physics by using tracks: ATLAS evolution from the LHC to the HL-LHC	KHOO, Teng Jian
17:30	[161] □323□ Improving jet substructure performance in ATLAS	ADORNI BRACCESI CHIASSI, Sofia
17:45	[230] □324□ Beam Tests of HV-CMOS Pixel Sensors for the ATLAS HL-LHC Tracker Upgrade	WESTON, Thomas
18:00	[155] □325□ Track-based pileup subtraction for jet and MET triggering at the HL-LHC ATLAS upgrade	VALENTE, Marco
18:15	[102] □326□ Data analysis at Level-1 Trigger level: Migrating complex selection algorithms from offline analysis and High-Level trigger to the trigger electronics	JEITLER, Manfred
18:30	[382] □327□ Barrel time-of-flight detector for the PANDA experiment at FAIR	KRATOCHWIL, Nicolaus
18:45	[236] □328□ Beam-gas vertex detector for beam profile measurement at the LHC	HOPCHEV, Plamen Hristov

### Nuclear, Particle-and Astrophysics (TASK-FAKT): II: Standard Model I - Room 2 (17:00 - 19:00)

time	[id] title	presenter
17:00	[220] □311□ ITk performance and pixel detector layout at the High-Luminosity LHC	CALACE, Noemi
17:15	[172] □312□ DL1: A new Deep Neural Network-based higher level tagger for ATLAS Flavour Tagging	LANFERMANN, Marie

17:30	[217] □313□ Identification of Hadronically-Decaying W Bosons and Top Quarks Using Machine Learning in ATLAS at $\sqrt{s} = 13$ TeV	AKILLI, Ece
17:45	[129] □314□ Combination of Higgs differential observables and limits on Higgs couplings at CMS	KLIJNSMA, Thomas
18:00	[156] □315□ Semileptonic decays at LHCb	MAURIN, Brice Emile
18:15	[263] □316□ CP violation in b-baryons at LHCb	SILVA COUTINHO, Rafael
18:30	[241] □317□ Flavour tagging in $pp$ collisions at LHCb	BATTISTA, Vincenzo
18:45	[281] □318□ Measurement of the $CP$ violation parameter $A_{\Gamma}$ in $D^0 \rightarrow h^+h^-$ decays at LHCb	MARINO, Pietro

# Thursday, 24 August 2017

## Nuclear, Particle-and Astrophysics (TASK-FAKT): IV: Machine & Accelerators - Room 2 (10:45 - 13:00)

time	[id] title	presenter
10:45	[321] □331□ FCC(-hh) detector design studies	HRDINKA, Julia
11:00	[330] □332□ Designing a 100 TeV Future Circular Hadron Collider: beam-beam studies.	BARRANCO GARCIA, Javier
11:15	[334] □333□ PSI High-Field Magnet Design for the FCC Design Study	AUCHMANN, Bernhard
11:30	[315] □334□ Electron cloud effects in hadron colliders	METHER, Lotta
11:45	[153] □335□ High efficiency cyclotron trap assisted positron moderator	GERCHOW, Lars
12:00	[287] □336□ Non-linear dynamics diffusive mechanisms and impact on accelerators.	PIELONI, Tatiana
12:15	[299] □337□ A cold neutron beam facility for particle physics at the ESS	Dr KONRAD, Gertrud
12:30	[227] □338□ muCool: Development of a novel high-brightness low-energy muon beamline	Ms BELOSEVIC, Ivana
12:45	[147] □339□ Investigating the solid deuterium in the PSI UCN source moderator	Mr HILD, Nicolas

## Nuclear, Particle-and Astrophysics (TASK-FAKT): VII: Standard Model II - Room 3 (14:00 - 16:00)

time	[id] title	presenter
14:00	[128] □361□ Holographic QCD predictions for glueball decay patterns	Prof. REBHAN, Anton
14:15	[250] □362□ Lambda_c to Sigma pi pi decays at Belle	BERGER, Manfred
14:30	[191] □363□ Fully differential NLO predictions for rare and radiative lepton decays	ULRICH, Yannick
14:45	[353] □364□ Coherent double and triple neutral Pion Photoproduction off Deuterons	Mr GÜNTHER, Michael
15:00	[363] □365□ Measurement of $\pi^0\pi^{\pm}$ Photoproduction off the Deuteron with the A2 Experiment	Mr LUTTERER, Sebastian
15:15	[387] □366□ Cosmic-ray muon radiography for Alpine glaciers	Dr NISHIYAMA, Ryuichi
15:30	[181] □367□ NLO QCD corrections to Higgs boson pair production via gluon fusion	GLAUS, Seraina
15:45	[240] □368□ Measurement of low-mass dielectrons in p-Pb collisions from LHC Run 2	CAPON, Aaron

## Nuclear, Particle-and Astrophysics (TASK-FAKT): V: Research & Development I - Room 2 (14:00 - 16:00)

time	[id] title	presenter
14:00	[180] □341□ Radiation damage in the LHCb silicon tracker	GRAVERINI, Elena
14:15	[255] □342□ Development of a new class of scintillating plastic fibres	GRUBER, Lukas
14:30	[185] □343□ Characterisation of multi-channels Silicon Photomultipliers	Mrs STRAMAGLIA, Maria Elena
14:45	[277] □344□ Production and Quality Assurance of Scintillating Fiber Detectors for the LHCb Upgrade	MACKO, Vladimir

15:00	[358] □345□ Performance of Multiplexed XY Resistive Micromegas detectors in a high intensity test beam	BANERJEE, Dipanwita
15:15	[207] □346□ Test beam characterization results with CCPDv4 capacitively coupled to FEI4	Mr DI BELLO, Francesco Armando
15:30	[248] □347□ TCT studies of irradiated HV-CMOS sensors	MERLASSINO, Claudia
15:45	[202] □348□ HV-CMOS MAPS tests for the ATLAS ITk LH-LHC upgrade	VICENTE BARRETO PINTO, Mateus

**Nuclear, Particle-and Astrophysics (TASK-FAKT): VI: Detectors II - Room 2 (16:30 - 18:30)**

time	[id] title	presenter
16:30	[336] □351□ Current status of the ASACUSA Hbar HFS experiment	Dr MÄCKEL, Volkhard
16:45	[268] □352□ A Detector for Measuring the Ground State Hyperfine Splitting of Antihydrogen	Ms KOLBINGER, Bernadette
17:00	[340] □353□ In-Orbit Performance and First Results of POLAR: A dedicated Gamma-Ray Burst Polarimeter	BERNASCONI, Tancredi
17:15	[266] □354□ Background free search for neutrinoless double beta decay with the GERDA experiment	Dr HILLER, Roman
17:30	[193] □355□ The Mu3e Fiber Detector	Ms DAMYANOVA, Antoaneta
17:45	[448] □356□ Single Photon Extraction for Atmospheric Cherenkov Gamma-Ray Telescopes with Silicone Sensors allows for Novel and Promising Particle Shower Representation	NEISE, Dominik
18:00	[235] □357□ 1S-2S Spectroscopy of Positronium	WICHMANN, Gunther
18:15	[391] □358□ PERC Status Report	WANG, Xiangzun

**Nuclear, Particle-and Astrophysics (TASK-FAKT): VIII: Neutrino & Astroparticles - Room 3 (16:30 - 18:30)**

time	[id] title	presenter
16:30	[405] □371□ Neutrino cross sections and oscillation physics	Dr WILKINSON, Callum
17:00	[194] □372□ Neutrino cross section measurements at the T2K experiment	BERNER, Roman
17:15	[206] □373□ Astrophysical Neutrino Searches with IceCube	BRON, Stephanie
17:30	[286] □374□ Dark matter search with the XENON1T experiment	KAZAMA, Shingo
17:45	[244] □375□ Search for axion dark matter with ultracold neutrons	RAWLIK, Michal
18:00	[200] □376□ First Gamma-ray observations with DAMPE	MUNOZ SALINAS, Maria Fernanda
18:15	[368] □377□ The ArDM Experiment	MU, Wei

# Friday, 25 August 2017

## Nuclear, Particle-and Astrophysics (TASK-FAKT): IX: Research & Development II - Room 2 (11:15 - 14:00)

time	[id] title	presenter
11:15	[100] □381□ High purity 100 GeV electron identification with synchrotron radiation	DEPERO, Emilio
11:30	[292] □382□ Xurich II: A Dual-phase TPC for Scintillation and Ionization Yield Measurements in Liquid Xenon	Dr KISH, Alexander
11:45	[344] □383□ Calibrations of the XENON1T dark matter detector	Ms CAPELLI, Chiara
12:00	[322] □384□ Studies of a magnesium fluoride (MgF <sub>2</sub> ) photomultiplier tube for direct observation of liquid argon scintillation light	Ms RANSOM, Chloe
12:15	[273] □385□ SST-1M camera prototype commissioning for the Cherenkov Telescope Array	ALISPACH, Cyril Martin
12:30	[253] □386□ A Thin Time-of-flight PET scanner based on fast monolithic silicon pixel detectors	BANDI, Yves
12:45	[294] □387□ Status Update of NoMoS	Mr MOSER, Daniel
13:00	[224] □388□ SHiP: a new facility with a dedicated detector to search for new long-lived neutral particles	BEZSHYIKO, Iaroslava
13:15	[366] □389□ A novel Transient-Current-Technique based on 2-Photon Absorption in Diamond	DORFER, Christian
13:30	[404] □390□ The Bern Cyclotron proton irradiation facility	Mr FEHR, Armin
13:45	[364] □391□ FACT - More than five Years of Reliable Operation with SiPMs in an IACT Camera	NEISE, Dominik

## Nuclear, Particle-and Astrophysics (TASK-FAKT): X: Beyond the Standard Model - Room 3 (11:15 - 13:45)

time	[id] title	presenter
11:15	[345] □401□ New Physics in the Flavour Sector	CRIVELLIN, Andreas
11:30	[176] □402□ Tests of lepton universality in semileptonic beauty quark decays	OWEN, Patrick Haworth
11:45	[265] □403□ Test of lepton flavour universality at LHCb	LIONETTO, Federica
12:00	[307] □404□ Charmless hadronic B decays at LHCb: results and prospects	GIANI, Sebastiana
12:15	[325] □405□ A sensitivity study for the measurement of the photon polarization in $B^+ \rightarrow K^+ \pi^- \pi^+ \gamma$ decays at LHCb	BELLEE, Violaine
12:30	[131] □406□ Search for strongly and electroweakly produced SUSY in final states with opposite sign dileptons	VESTERBACKA, Leonora
12:45	[247] □407□ Search for direct top squark pair production in final states with two leptons in $\sqrt{s}=13$ TeV $pp$ collisions with the ATLAS detector	RIMOLDI, Marco
13:00	[209] □408□ Search for supersymmetry in the fully hadronic final state with the CMS detector	SCHOENENBERGER, Myriam
13:15	[215] □409□ Heavy Neutral Lepton search in ATLAS LHC's run 2	DUBREUIL, Arnaud
13:30	[120] □410□ Search for a single produced vector-like quark B decaying to a b quark and a Higgs boson in a full hadronic final state using boosted topologies	RAUCO, Giorgia