4th FCC Physics and Experiments Workshop

Tuesday, 10 November 2020

Theory and phenomenology: QCD and EW physics (11:00 - 12:30)

time	[id] title	presenter
11:00	[19] Ultimate strong coupling determination at the FCC-ee via W and Z Pseudo-observables	D'ENTERRIA, David
11:30	[20] Learning physics at future e-e+ colliders with machine	LIU, Tao
12:00	[21] Resolving Parton Dynamics at Small x at FCC-eh	BONVINI, Marco

Theory and phenomenology: QCD and EW (13:30 - 17:00)

time	[id] title	presenter
13:30	[27] Precision Tests of Electroweak Interactions in ep	BRITZGER, Daniel
14:00	[24] New 3 loop correction to electroweak precision observables	CHEN, Lisong
14:25	[25] Global EW fit in the FCC-ee era	ERLER, Jens
14:55	[81] Revisiting QCD uncertainties in the experimental measurement of AFB(b)	Prof. ALCARAZ MAESTRE, Juan
15:20	Coffee break	
15:40	[83] Update on Bhabha luminosity at 0.01%	WARD, Bennie
16:05	[26] Robust measure of event isotropy at colliders	CESAROTTI, Cari
16:30	[28] QCD measurement in LEP data, lessons for FCC-ee	BADEA, Anthony

Wednesday, 11 November 2020

Theory and phenomenology: BSM and flavour physics (11:00 - 13:10)

time	[id] title	presenter
11:00	[38] Exploring heavy neutrinos at FCC	KULKARNI, Suchita
11:20	[37] Testing neutrino mass generation mechanism at the future colliders	DAS, Arindam
11:40	[76] Probing Low Scale Heavy Neutral Leptons at Colliders	MITRA, Manimala
12:00	[30] Triplet scalar DM at FCC-hh	RAMSEY-MUSOLF, Michael
12:25	[31] Dark matter spin effects	GRZADKOWSKI, Bohdan

Theory and phenomenology: BSM and flavour physics, part 2 (14:00 - 18:30)

time	[id] title	presenter
14:00	[32] Flavour studies at the Tera-Z factory	LI, LINGFENG
14:30	[33] Hunting scalar lepton partners - an example of direct BSM searches at lepton colliders	BAUM, Sebastian
15:00	[34] Electroweak Top Couplings, Partial Compositeness and Top Partner Searches	ENGLERT, Christoph
15:30	Coffee break	
16:00	[39] Down type iso-singlet quarks at FCC	PAUL, Arpon
16:20	[35] Four tops for the future	SALVIONI, Ennio
16:50	[29] Composite scalar searches	DEANDREA, Aldo
17:20	[36] New physics in B meson mixing: future sensitivity and limitations	LIGETI, Zoltan

Thursday, 12 November 2020

Theory and phenomenology: Higgs physics (09:00 - 12:30)

time	[id] title	presenter
09:00	[41] Update on recent pp->HH computations: (full mt)	Dr BAGLIO, Julien
09:30	[42] Update on recent pp->HH computations: (N3LO, mt=infty)	SHAO, Huasheng
10:00	[40] Update on Higgs self-coupling determination at FCC-hh	SELVAGGI, Michele
10:30	Coffee break	
11:00	[43] Triple Higgs couplings in BSM models at higher-orders	Prof. KANEMURA, Shinya
11:30	[44] Exotic Higgs decays and EW phase transition	RAMSEY-MUSOLF, Michael
12:00	[45] Exotic Higgs decays into long lived particles	ZURITA, José Francisco

Theory and phenomenology: Higgs, part 2 (12:30 - 18:00)

time	[id] title	presenter
12:30	Lunch break	
14:00	[46] Naturalness at FCC	REECE, Matthew
14:30	[47] A Natural Composite Higgs via Universal Boundary Conditions	CSAKI, Csaba
15:00	[48] Power meets Precision to explore the Symmetric Higgs Portal	SPANNOWSKY, Michael
15:30	Coffee break	
16:00	[49] The EW phase transition at future colliders: confronting theoretical uncertainties and complementary channels	PAPAEFSTATHIOU, Andreas
16:30	[50] 2HDM at 100 TeV collider	SU, Shufang
17:00	[51] Leptoquarks in Oblique Corrections and Higgs Signal Strength: Status and Prospects at FCC	CRIVELLIN, Andreas
17:30	[52] Probing the Top-Higgs Sector with Composite Higgs models at the future FCC-hh Hadron Collider	BAUTISTA CHOQQUE, Carlos

Friday, 13 November 2020

Theory and phenomenology: Higgs, part 3 (10:50 - 12:50)

time	[id] title	presenter
10:50	[53] Incorporating diBoson/aTGC measurements into global SMEFT studies at future e+e- colliders	DE BLAS, Jorge
11:15	[55] A New Precision Process at FCC-hh: the diphoton leptonic Wh channel	BISHARA, Fady Adibsamy
11:40	[57] Exploring anomalous couplings in Higgs boson pair production through shape analysis	HEINRICH, Gudrun
12:05	[56] Prospective constraints on anomalous Higgs boson interactions in an effective Lagrangian via diphoton production at FCC-h	SENOL, Abdulkadir