

Summer School and Workshop on the Standard Model and Beyond September 3 - 14, 2014

Thursday Sept 4th

School lectures		
9:00 - 10:00	G. Degrassi (U. Roma Tre)	Electroweak Standard Model 1
10:00 - 11:00	F. Feruglio (INFN, Padua)	Flavour Physics 1
11:00 - 11:30	Coffee break	
11:30 - 12:30	G. Degrassi (U. Roma Tre)	Electroweak Standard Model 2
12:30 - 13:30	F. Feruglio (INFN, Padua)	Flavour Physics 2
13:30 - 16:00	Lunch break	
16:00 - 17:00	S. Sarkar (Oxford U.)	Astroparticle Physics (dark matter searches)
Workshop and student's talks		
17:00 - 17:40	P. Minkowski (Bern U.)	On the restricted nature of gauge theory extensions of the nu-mass extended SM neglecting gravity
17:40 - 18:00	J. Penedo (IST/CFTP)	Radiative charged-lepton mass generation in multi-HDM
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	
18:50 - 19:30	A. Studenikin (Moscow State U. & JINR, Dubna)	Neutrino electromagnetic properties: new limits and phenomenology
19:30 - 20:10	S. Sarkar (Oxford U.)	BICEP2

Friday Sept 5th

School lectures		
9:00 - 10:00	G. Degrassi (U. Roma Tre)	Electroweak Standard Model 3
10:00 - 11:00	F. Maltoni (Louvain U., CP3)	Perturbative QCD 1
11:00 - 11:30	Coffee break	
11:30 - 12:30	F. Maltoni (Louvain U., CP3)	Perturbative QCD 2
12:30 - 13:30	A. Djouadi (U. Paris-sud)	Higgs Physics 1
13:30 - 16:00	Lunch break	
16:00 - 17:00	G. Altarelli (Rome III U. & CERN)	Neutrino Physics - theory 1
17:00 - 18:00	L. Linssen (CERN)	CLIC: physics and detectors at a future TeV-scale e+e- collider
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	
Workshop talks		
18:50 - 19:30	I. Sachs (LMU)	Scale versus Conformal Invariance
19:30 - 20:10	A. Cooper-Sarkar (Oxford U.)	PDFs

Saturday Sept 6th

School lectures		
9:00 - 10:00	G. Altarelli (Rome III U. / CERN)	Neutrino Physics - theory 2
10:00 - 11:00	D. Kazakov (JINR, Dubna)	Introduction to Supersymmetry 1
11:00 - 11:30	Coffee break	
11:30 - 12:30	D. Kazakov (JINR, Dubna)	Introduction to Supersymmetry 2
12:30 - 13:30	A. Djouadi (U. Paris-sud)	Higgs Physics 2
13:30 - 16:00	Lunch break	
16:00 - 17:00	N. Harnew (Oxford U.)	Physics results from LHCb
Workshop and student's talks		
17:00 - 17:40	C. Giunti (INFN Torino)	Phenomenology of Light Sterile Neutrinos
17:40 - 18:00	M. Paucar Acosta (CBPF)	Production of Long-lived Sparticles at the LHC
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	
18:50 - 19:30	S. Petcov (SISSA)	TBA
19:30 - 20:10	A. Policicchio (INFN)	BSM searches in ATLAS

Sunday Sept 7th

School lectures		
9:00 - 10:00	P. Weisz (MPI, Munch)	Lattice QCD
10:00 - 11:00	G. Altarelli (Rome III U. / CERN)	BSM: bottom-up approach
11:00 - 11:30	Coffee break	
11:30 - 12:30	G. Ross (Oxford U.)	BSM: String/SUGRA 1
12:30 - 13:30	I. Antoniadis (École Polytechnique)	Introduction to Extra dimensions and Braneworlds 1
13:30 - 16:00	Lunch break	
16:00 - 17:00	I. Antoniadis (École Polytechnique)	Introduction to Extra dimensions and Braneworlds 2
17:00 - 18:00	G. Ross (Oxford U.)	BSM: String/SUGRA 2
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	
Workshop talks		
18:50 - 19:30	J. Bernabeu (IFIC)	Time Reversal Violation for entangled neutral B mesons
19:30 - 20:10	N. Harnew (Oxford U.)	Physics prospects for the LHCb Upgrade

Monday Sept 8th

School lectures		
9:00 - 10:00	C. Angelantonj (Turin U. & INFN, Turin)	Introduction to String Theory 1
10:00 - 11:00	N. Konstandinis (U. College London)	Overview of ATLAS results
11:00 - 11:30	Coffee break	
11:30 - 12:30	P. Sphicas (Athens/CERN)	Physics results from CMS
12:30 - 13:30	L. Ramello (U. Piemonte Orientale & INFN)	Physics results from ALICE
13:30 - 16:00	Lunch break	
Workshop and student's talks		
16:00 - 16:40	D. Tommasini (NCSR Demokritos)	A method of the diff. equation approach to master integrals
16:40 - 17:20	W. Kotlarski (Warsaw U.)	Higgs and the EW precision observables in the MRSSM
17:20 - 17:40	D. Wegman (CFTP, IST, Lisboa)	TBA
17:40 - 18:00	Coffee break	
18:00 - 18:20	Discussion	
18:20 - 18:50	D. Fassouliotis (U. Athens)	Higgs Physics in ATLAS
18:50 - 19:30	M.M. Llacer (Goettingen U.)	Top physics in ATLAS

Tuesday Sept 9th

Workshop talks		
9:00 - 9:40	P. Osland (U. Bergen)	The approach to CP conservation in the 2HDM
9:40 - 10:20	B. Grzadkowski (Warsaw U.)	a) Prospects for 2HDM CP violation in light of the LHC Higgs signal b) Two-Higgs Doublet Models with Scalar Singlet Dark Matter
10:20 - 11:00	T. Jelinski (Silesia U.)	SO(10) inspired extended GMSB models
11:00 - 11:30	Coffee break	
School lectures		
11:30 - 12:30	C. Angelantonj (Turin U. & INFN, Turin)	Introduction to String Theory 2
Workshop and student's talks		
12:30 - 13:10	J. A. Aguilar-Saavedra (Granada U.)	Flavourfull searches for seesaw at LHC
13:10 - 13:30	L. Heurtier (CPHT Ecole Polytechnique)	Large-Field Inflation and Supersymmetry Breaking
13:30 - 16:00	Lunch break	
16:00 - 16:40	D. Ghilencea (CERN, Bucharest, IFIN-HH)	SUSY fine tuning without prejudice
16:40 - 17:20	M. Mondragon (UNAM)	Reduction of couplings: MSSM and Finite Theories
17:20 - 18:00	M. Krawczyk (Warsaw U.)	Vacuum stability in IDM
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	
18:50 - 19:30	A. Barr (Oxford U.)	Searches for dark matter in ATLAS
19:30 - 20:10	J. Espin (Nottingham U.)	Second Order Standard Model

Wednesday Sept 10th

Workshop talks		
9:00 - 9:40	Z. Lalak (Warsaw U.)	Hints of BSM physics in the SM effective potential
9:40 - 10:20	S. Capozziello (U. Napoli)	Dark Energy and Dark Matter as Curvature Effects
10:20 - 11:00	J. M. Frere (PhysTh -ULB)	How much Dark Matter in the Solar System?
11:00 - 11:30	Coffee break	
11:30 - 12:10	F. del Aguila (Granada U.)	Four lepton signals of new physics at the LHC
12:10 - 12:50	P. Mastrolia (MPI, Munich)	Progress on Scattering Amplitudes
12:50 - 13:30	G. Branco (CFTPIST/ UL)	Majorana Neutrinos and Quasi-Degeneracy at the Origin of Leptonic Mixing

15.00 Half Day Excursion

Thursday Sept 11th

School lectures		
9:00 - 10:00	G. Lazarides (Thessaloniki U.)	Astroparticle Physics (theory) 1
10:00 - 11:00	K. Papadodimas (U. Groningen & CERN)	Gauge-Gravity Duality 1
11:00 - 11:30	Coffee break	
11:30 - 12:30	G. Lazarides (Thessaloniki U.)	Astroparticle Physics (theory) 2
12:30 - 13:30	K. Papadodimas (U. Groningen & CERN)	Gauge-Gravity Duality 2
13:30 - 16:00	Lunch break	
16:00 - 17:00	A. de Roeck (CERN)	Higgs at the LHC (Experimental)
Workshop and student's talks		
17:00 - 17:40	C. Pallis (Valencia U.)	CMSSM With Generalized Yukawa Quasi-Unification: An Update
17:40 - 18:10	P. Anastopoulos (TU Vienna)	Twisted state production
18:10 - 18:30	Coffee break	
18:30 - 18:50	Discussion	
18.50 - 19:30	A. Morselli (Roma 2, INFN)	Astroparticle Physics (Experimental)

Friday Sept 12th

School lectures		
9:00 - 10:00	F. Simon (MPI - Munich)	ILC - The International Linear Collider
10:00 - 11:00	F. Zimmermann (CERN)	Future Highest-Energy Circular Colliders
11:00 - 11:30	Coffee break	
11:30 - 11:50	F. Zimmermann (CERN)	LHC upgrade
11:50 - 12:50	V. Mukhanov (LMU, Munich)	Introduction to Cosmology 1
Workshop and student's talks		
12:50 - 13:30	M. Badziak (Warsaw U.)	Phenomenology of a light singlet-like scalar in NMSSM
13:30 - 16:00	Lunch break	
16:00 - 17:00	U. Lindstrom (Uppsala U.)	Introduction to supergravity
17:00 - 18:00	C. Andreopoulos (Liverpool U.)	Experimental Neutrino Physics
18:00 - 18:20	Coffee break	
18:20 - 18:50	Discussion	

19.30 Greek night

Saturday Sept 13th

School lectures		
9:00 - 10:00	V. Mukhanov (LMU, Munich)	Introduction to Cosmology 2
Workshop and student's talks		
10:00 - 10:40	D. Emmanuel-Costa (CFTP, IST, U. Lisboa)	Proton Decay: constraints on New Physics
10:40 - 11:10	Coffee break	
11:10 - 11:50	M. Felcini (CERN, Boston U.)	BSM searches with CMS
11:50 - 12:30	C. Wetterich (U. Heidelberg)	Big Bang or Freeze?

Closing!