

**School and Workshops  
on the Standard Model and Beyond - Cosmology  
August 29 - September 5, 2010**

**Monday 30<sup>th</sup> August 2010**

<b>School</b>		
9.00-10.00	W. Hollik	Electroweak Standard Model I
10.00-11.00	W. Hollik	Electroweak Standard Model II
11.00-11.30	Coffee Break	
11.30-12.30	G. Martinelli	Perturbative QCD I
12.30-13.30	G. Martinelli	Perturbative QCD II
13.30-16.00	Lunch Break	
16.00-17.00	G. Martinelli	Perturbative QCD III
17.00-18.00	W. Hollik	Electroweak Standard Model III
18.00-18.30	Coffee Break	
18.30-19.30	M. Seymour	Monte Carlo Event Generators
<b>Workshop</b>		
19.30-20.00	T. Hahn	FeynHiggs 2.7
20.00-20.30	A. Hoang	Heavy Quark Masses and Renormalons

**Tuesday 31<sup>st</sup> August 2010**

<b>School</b>		
9.00-10.00	C. Papadopoulos	Loop QCD
10.00-11.00	L. Fayard	ATLAS Physics Programme
11.00-11.30	Coffee Break	
11.30-12.30	A. De Roeck	CMS Physics Programme
12.30-13.30	S. Petcov	Neutrino Physics I
13.30-16.00	Lunch Break	
<b>Workshop</b>		
16.00-16.30	I. Wingerter-Seez	First ATLAS results
16.30-17.00	R. Pittau	Recent news and results in the computation of NLO processes with new techniques
17.00-17.30	T. Riemann	Algebraic tensor Feynman integral reduction
17.30-18.00	S. Recksiegel	Flavour Physics Effects of a 4th Generation
18.00-18.30	Coffee Break	
18.30-19.00	P. Del Aquila	Electroweak constraints on new physics
19.00-19.30	M. Beneke	Squark and top quark production at the LHC and Tevatron
19.30-20.00	B. Grzadkowski	Natural 2HDM
20.00-20.30	C. Munoz	Advances in the $\mu$ SSM: LHC phenomenology and dark matter

## Wednesday 1<sup>st</sup> September

<b>School</b>		
9.00-10.00	S. Petcov	Neutrino Physics I
10.00-11.00	M. Pepe - Altarelli	LHCb Physics Programme
11.00-11.30	Coffee Break	
11.30-12.30	J. J. Gaardhoje	ALICE Physics Programme
12.30-13.30	E. Tsesmelis	LHC Upgrade and CLIC
<b>Free Afternoon</b>		

## Thursday 2<sup>nd</sup> September 2010

<b>School</b>		
9.00-10.00	A. Djouadi	Higgs Physics (SM)
10.00-11.00	U. Nierste	Flavour Physics I
11.00-11.30	Coffee Break	
11.30-12.30	R.M. Godbole	Introduction to SUSY and MSSM I
12.30-13.30	G. Lazarides	Cosmology and Particle Physics I
13.30-16.00	Lunch Break	
16.00-17.00	U. Nierste	Flavour Physics II
17.00-17.40	G. Martinelli	Lattice QCD
17.40-18.40	G. Lazarides	Cosmology and Particle Physics II
18.40-19.00	Coffee Break	
<b>Workshop</b>		
19.00-19.30	E. Masso	Light particles coupled to photons
19.30-20.00	K. Enqvist	TBA
20.00-	Z. Lalak	TBA

20.30		
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### Friday 3<sup>rd</sup> September 2010

<b>School</b>		
9.00-10.00	G. Servant	Cosmology and Physics Beyond the SM
10.00-11.00	S. Pokorski	Physics Beyond the SM and LHC I
11.00-11.30	Coffee Break	
11.30-12.30	S. Pokorski	Physics Beyond the SM and LHC II
12.30-13.30	T. Behnke	ILC
13.30-16.00	Lunch Break	
<b>Workshop</b>		
16.00-16.30	A. Ali	Tetraquarks - Evidence Grows!
16.30-17.00	G. Branco	TBA
17.00-17.30	M. Rebelo	Multi-Higgs Models and CP Violation
17.30-18.00	I. de Medeiros Varzielas	Lepton Mixing induced by flavour symmetry and Leptogenesis constraints
18.00-18.30	Coffee Break	
18.30-19.00	A. Ibarra	High Energy Cosmic Rays from Decaying Dark Matter
19.00-19.30	G. Gounaris	An update on Asymptotic Helicity Conservation in SUSY
19.30-20.00	C. Grojean	Deciphering Electroweak Symmetry Breaking
20.00-20.30	Q. Shafi	Inflation and the hunt for Gravity Waves

## Saturday 4<sup>th</sup> September 2010

<b>School</b>		
9.00-10.00	R.M. Godbole	Introduction to SUSY and MSSM II
10.00-11.00	A. Djouadi	Higgs Physics (MSSM)
11.00-11.30	Coffee Break	
11.30-12.30	A. Savoy - Navarro	TEVATRON Physics I
12.30-13.30	A. Savoy - Navarro	TEVATRON Physics II
13.30-16.00	Lunch Break	
<b>Workshop</b>		
16.00-16.30	G. Altarelli	Is the flavour group discrete?
16.30-17.00	K. Tamvakis	Hierarchical Neutrino Masses and Mixing in GUTS
17.00-17.30	R. Torre	Signals of single particle production at the earliest LHC
17.30-18.00	H. Eberl	Impact of squark generation mixing on the search for squark decaying into fermions at LHC
18.00-18.30	Coffee Break	
18.30-19.00	C. B. Braeuninger	Radiatively induced flavour violation in the general two-Higgs doublet model with Yukawa alignment
19.00-19.30	P. Kovacikova	TBA
19.30-20.00	M. Quiros	Soft Walls
20.00-20.30	N. Mavromatos	Quantum Gravity, Cosmology and High-energy Gamma-Ray Astronomy

## Sunday 5<sup>th</sup> September 2010

<b>School</b>		
9.00-10.00	I. Antoniadis	Physics of Extra Dimensions I
<b>Workshop</b>		
10.00-10.30	J. Sola	The cosmological constant problem and the dynamical relaxation of the vacuum energy
10.30-11.00	M. Lola	Gravitino Dark Matter and LHC Searches in R-violating supersymmetry
11.00-11.30	Coffee Break	
11.30-12.00	M. Krawczyk	Inert Model and the Evolution of the Universe
12.00-12.30	I. Rizos	TBA
12.30-13.00	S. Hardeman	Effects of non-decoupled mass hierarchies on cosmology
13.00-17.00	Lunch Break	
17.00-17.30	P. Anastasopoulos	Realistic Yukawa textures and mass hierarchies from orientifold compactifications
17.30-18.00	N. Irges	A new model for confinement
18.00-18.30	Coffee Break	
18.30-19.00	H. Nielsen	Random Dynamics
19.00-19.30	A. Masiero	LFV, DM and the TeV New Physics challenge
<b>School</b>		
19.30-20.30	I. Antoniadis	Physics of Extra Dimensions II