

June 19-21, 2006

LoopFest V

Radiative Corrections for the International Linear Collider:
Multi-loops and Multi-legs

Stanford Linear Accelerator Center

Program

Kavli Auditorium, Kavli Building (Building 51)

Monday, June 19, 2006

	Speaker	Topic	(MIN)	Chair
	MORNING	OVERVIEW, ILC, LHC		L. Dixon
8:00	REGISTRATION AND REFRESHMENTS		60	
9:00	Lance Dixon	Welcome	10	
9:10	Stefan Dittmaier	Precision Standard Model physics-- overview	40	
9:50	Tor Raubenheimer	ILC status and politics	30	
10:20	Tom LeCompte	LHC - the first inverse femtobarn	40	
11:00	COFFEE BREAK		30	
11:30	Ayres Freitas	Toward the complete 2-loop precision electroweak computation	30	
12:00 Noon	Stefano Frixione	Monte Carlos at NLO accuracy	40	
12:40	LUNCH		80	
	AFTERNOON	TWISTORS, NNLO AND BEYOND		D. Wackerroth
2:00	Carola Berger	Bootstrapping one-loop 2->n amplitudes	30	
2:30	Thomas Gehrmann	e+e- -> 3 jets at NNLO: Results for all QED-type colour factors	30	
3:00	Thomas Becher	B -> Xs + gamma to NNLO: effect of the photon energy cut	30	
3:30	COFFEE BREAK		30	
4:00	Alex Mitov	Three-loop time-like splitting functions in Mellin space, and NNLO fragmentation	30	
4:30	Kirill Melnikov	Fully exclusive NNLO computations	30	
5:00	Lance Dixon	Multi-loop miracles in N=4 super-Yang-Mills theory	30	

Tuesday, June 20, 2006

	Speaker	Topic	(MIN)	Chair
	MORNING	PRECISION SUSY, HIGGS AND TOP		Z. Kunszt
8:30	REFRESHMENTS		30	
9:00	Stephen Martin	Precision relations of masses to Lagrangian parameters in SUSY	30	
9:30	Karol Kovarik	SPA project and the on-shell scheme (in the MSSM)	20	

9:50	Dominick Stockinger	Regularization of SUSY theories	20	
10:10	Fernando Febres Cordero	NLO QCD corrections to $W b \bar{b}$ production at the Tevatron	20	
10:30	COFFEE BREAK		30	
11:00	Heidi Rzehak	Two-loop contributions to the Higgs sector in the MSSM with complex parameters	25	
11:25	Markus Weber	Radiative corrections to Higgs decay to 4 fermions	20	
11:45	Andre Hoang	The t - \bar{t} threshold	30	
12:15	Adrian Signer	A pNRQCD approach to t - \bar{t} near threshold	25	
12:40	LUNCH		80	
	AFTERNOON	EVENT GENERATORS AND JET MODELING		U. Baur
2:00	Oliver Brein	Higgs + Jet angular and p_T distributions: MSSM versus SM	25	
2:25	Peter Skands	Pythia and Vincia	25	
2:50	Phil Stephens	HERWIG	25	
3:15	COFFEE BREAK		30	
3:45	Thorsten Ohl	WHIZARD and O'Mega	25	
4:10	Mauro Moretti	ALPGEN	25	
4:35	Tilman Plehn	SMADGRAPH/ MADEVENT	25	
5:00	Robin Erbacher	Consumer report from CDF	30	
6:30	RECEPTION	<u>Hunan Garden - No Host</u>		
7:00	DINNER	<u>Hunan Garden - No Host</u>		

Wednesday, June 21, 2006

	Speaker	Topic	(MIN)	Chair
	MORNING	EFTS, RESUMMATION AND INTEGRATION		S. Martin
8:30	REFRESHMENTS		30	
9:00	Matthias Neubert	Soft Collinear EFT for colliders	40	
9:40	Nikolaos Kidonakis	Threshold resummation & finite-order expansions through NNNLO	30	
10:10	Benjamin Fuks	Resummation applied to slepton pair production	30	
10:40	COFFEE BREAK		30	
11:10	Stefano Pozzorini	Electroweak Sudakov logarithms	30	
11:40	Elise de Doncker	Iterated integration for a non-planar two-loop diagram	30	
12:10	Alejandro Daleo	Numerical (multi)loop calculations	30	
12:40	LUNCH		80	
	AFTERNOON	PRECISION QCD, MC AND MULTILEG NLO		M. Peskin
2:00	Markus Wobisch	Precision QCD at the Tevatron	30	
2:30	Stefan Dittmaier	hadron hadron $\rightarrow t \bar{t} + \text{jet}$ at NLO	30	
3:00	Zoltan Nagy	Parton shower as QCD prediction	30	
3:30	COFFEE BREAK		30	
4:00	Gudrun Heinrich	A semi-numerical approach to one-loop multi-leg amplitudes	30	
4:30	Walter Giele	Numerical computation of one-loop amplitudes	30	
5:00	Dave Soper	Summary and outlook	40	