



5th International Symposium on Radiative Corrections

Carmel Mission Inn, Carmel, CA

September 11 - 15, 2000



Program

Overview

Day	Date	Start	End	Event
Sunday	Sept 10	6:00 pm	9:00 pm	Registration and Reception
Monday	Sept 11	9:00 am	12:30 pm	Electroweak Physics I
		12:30 pm	2:30 pm	Lunch
		2:30 pm	6:00 pm	Heavy Quark Physics I
Tuesday	Sept 12	9:00 am	12:30 pm	e+e- Physics at Present and Future Facilities
		12:30 pm	2:30 pm	Lunch
		2:30 pm	6:00 pm	QCD Physics I
Note: The Wednesday sessions will be held at UC Santa Cruz in Room B-206 of the Earth and Marine Sciences (EMS) Building. All other conference sessions will be held at the Carmel Mission Inn.				
Wednesday	Sept 13	9:45 am	1:00 pm	Beyond the Standard Model I
		1:00 pm	2:30 pm	Lunch
		2:30 pm	6:00 pm	Heavy Quark Physics II
		7:00 pm	10:00 pm	Banquet (Chaminade at Santa Cruz)
Thursday	Sept 14	9:00 am	12:30 pm	QCD Physics II
		12:30 pm	2:30 pm	Lunch
		2:30 pm	6:00 pm	Computational Methods in Quantum Field Theory
Friday	Sept 15	9:00 am	12:30 pm	Electroweak Physics II and Beyond the Standard Model II
		12:30 pm	2:30 pm	Lunch
		2:30 pm	6:00 pm	Precision Physics at Future Colliders and Conference Summary
End of Conference				

Schedule of Talks

Monday, September 11, 2000, 9 am -- 12:30 pm: Electroweak Physics I

Chair: Stanley Brodsky (SLAC)

TIME	SPEAKER	TITLE
9:00 - 9:10	Howard Haber (UC Santa Cruz)	Introduction to RADCOR-2000
9:10 - 9:40	David Strom (Oregon)	Precision Electroweak Observables at LEP and SLD
9:40 - 10:10	Kaoru Hagiwara (KEK)	Precision Electroweak Measurements--a theorist's perspective
10:10 - 10:30	Tord Riemann (DESY, Zeuthen)	S-matrix approach to the Z resonance
10:30 - 11:00	COFFEE BREAK	
11:00 - 11:40	Kevin McFarland (Rochester)	Electroweak Physics at the Tevatron
11:40 - 12:10	Scott Willenbrock (Illinois)	Precision Top Physics
12:10 - 12:30	Andrzej Czarnecki (Alberta)	Radiative corrections to bound state properties in QED

Monday, September 11, 2000, 2:30 -- 6 pm: Heavy Quark Physics I

Chair: Bruce Schumm (UC Santa Cruz)

TIME	SPEAKER	TITLE
2:30 - 2:50	Christos Touramanis (Liverpool)	First Results from Babar
2:50 - 3:10	Asish Satpathy (Cincinnati)	First Results from Belle
3:10 - 3:30	Xin Zhao (Kansas)	The Measurement of V_{cb} and Charmless Hadronic B Decays at CLEO
3:30 - 4:00	Aida El-Khadra (Illinois U., Urbana)	Results from the Lattice
4:00 - 4:30	COFFEE BREAK	
4:30 - 5:10	Salvatore Mele (CERN, INFN Napoli)	Overview, and rho-eta fit
5:10 - 5:40	Martin Beneke (Aachen)	Factorization in Hadronic B-Decays
5:40 - 6:00	Ulrich Nierste (Fermilab)	The width difference of B_s mesons

Tuesday, September 12, 2000, 9 am -- 12:30 pm: e+e- Physics at Present and Future Facilities

Chair: Peter Rowson (SLAC)

TIME	SPEAKER	TITLE
9:00 - 9:30	Tom Junk (Carlton)	Searches at LEP2: Higgs and physics beyond the Standard Model
9:30 - 10:00	Stephan Wynhoff (CERN)	Standard Model Physics Results from LEP2
10:00 - 10:30	Stefan Dittmaier (Bielefeld)	Four-fermion production in e+e- annihilation
10:30 - 11:00	COFFEE BREAK	
11:00 - 11:20	Ansgar Denner (PSI)	Leading electroweak logarithms at one loop
11:20 - 11:40	Giampiero Passarino (Torino)	Single-W production, Fermion-Loop and ISR
11:40 - 12:10	Bennie Ward (Tennessee)	Precision Predictions for WW/4f Production in e+e- Annihilation: YFSWW3/KoralW1.42/YFSZZ
12:10 - 12:30	Zbigniew Was (INP, Cracow)	Coherent Exclusive Exponentiation of 2f Processes in e+e- Annihilation

Tuesday, September 12, 2000, 2:30 -- 6 pm: QCD Physics I

Chair: Lance Dixon (SLAC)

TIME	SPEAKER	TITLE
2:30 - 3:10	John Womersley (Fermilab)	QCD at the Tevatron: current results and future prospects
3:10 - 3:40	R. Keith Ellis (Fermilab)	NLO QCD corrections to femtobarn processes
3:40 - 4:00	Walter Giele (Fermilab)	Phenomenological implications of parton density function uncertainties
4:00 - 4:30	COFFEE BREAK	
4:30 - 5:10	Konstantin Chetyrkin (Karlsruhe)	Review of multi-loop QCD computations such as: beta functions, anomalous dimensions, quark mass relations; applications and future prospects
5:10 - 5:40	Johan Rathsmann (CERN)	Conformal expansions: a template for QCD predictions
5:40 - 6:00	Johannes Bluemlein (DESY, Zeuthen)	On the Drell-Yan-Levy Relation to $O(\alpha_s^2)$

Wednesday, September 13, 2000, 9:45 am -- 1 pm: Beyond the Standard Model I

Chair: Michael Graesser (UC Santa Cruz)

TIME	SPEAKER	TITLE
9:45 - 10:05	Edmond Berger (ANL)	Predictions for Associated Production of a Gaugino and a Gluino at Hadron Colliders in SUSY-QCD at NLO
10:05 - 10:25	Michael Spira (Paul Scherrer Institut)	Higgs Radiation off Quarks in Supersymmetric Theories at e+e- Colliders
10:25 - 10:45	Sven Heinemeyer (DESY)	New results for Feynman-diagrammatic higher order corrections in the MSSM
10:45 - 11:05	Marcela Carena (Fermilab)	MSSM Higgs sector phenomenology with explicit CP violation
11:05 - 11:35	COFFEE BREAK	
11:35 - 11:55	David Garcia (CERN)	Quantum corrections for the MSSM Higgs couplings to Standard Model fermions
11:55 - 12:15	Maria Herrero (Madrid)	Decoupling properties of MSSM particles in Higgs and top decays
12:15 - 12:35	Joan Sola (Barcelona)	FCNC top quark decays beyond the Standard Model
12:35 - 12:55	D.R. Tim Jones (Liverpool)	Exact results for soft supersymmetry-breaking beta-functions and their applications

Wednesday, September 13, 2000, 2:30 -- 6 pm: Heavy Quark Physics II

Chair: Gudrun Hiller (SLAC)

TIME	SPEAKER	TITLE
2:30 - 2:50	Tony Barker (Colorado)	KTeV Present and Future
2:50 - 3:10	Stefano Bertolini (INFN, SISSA)	Theory of ϵ_s'/ϵ_s
3:10 - 3:40	Gino Isidori (INFN, Frascati)	Supersymmetric effects in rare semileptonic decays of B & K mesons
3:40 - 4:00	Richard Lebed (Arizona State)	Weak Annihilation Radiative Decays
4:00 - 4:30	COFFEE BREAK	
4:30 - 4:50	Adam Leibovich (Carnegie Mellon)	V_{ub} from semileptonic decay and $b \rightarrow s$ gamma
4:50 - 5:10	Michael Luke (Toronto)	A new method for obtaining V_{ub}
5:10 - 5:40	Daniel Wyler (Zurich)	Extraction of CKM angles in the presence of new physics
5:40 - 6:00	Tobias Hurth (CERN)	Rare B Decays at the NLL level

Thursday, September 14, 2000, 9 am -- 12:30 pm: QCD Physics II

Chair: Zvi Bern (UCLA)

TIME	SPEAKER	TITLE
9:00 - 9:40	Rik Yoshida (ANL)	HERA small-x and/or diffraction
9:40 - 10:20	Carl Schmidt (Michigan State)	Review of BFKL
10:20 - 10:50	COFFEE BREAK	
10:50 - 11:20	Antonio Pich (Valencia)	Chiral perturbation theory
11:20 - 11:50	Simon Dalley (Cambridge)	Light-cone QCD on the lattice
11:50 - 12:10	Andre Hoang (CERN)	Charm Effects in Perturbative Bottom Mass Determination
12:10 - 12:30	Markus Diehl (SLAC)	Exclusive QCD

Thursday, September 14, 2000, 2:30 -- 6 pm: Computational Methods

Chair: Kirill Melnikov (SLAC)

TIME	SPEAKER	TITLE
2:30 - 2:50	Rajamani Narayanan (APS and BNL)	Nonperturbative simulation of chiral fermions
2:50 - 3:10	Robert Harlander (BNL)	Application of Pade's to fixed-order QCD computations
3:10 - 3:30	Thomas Gehrmann (Karlsruhe)	Multi-loop non-propagator integrals
3:30 - 4:00	Vladimir A. Smirnov (Moscow)	"Strategy of regions" --- expansions of Feynman diagrams in both Euclidean and pseudo-Euclidean regimes
4:00 - 4:30	COFFEE BREAK	
4:30 - 4:50	Davison Soper (Oregon)	Purely numerical calculations of event-shape variables
4:50 - 5:10	Pietro Anonio Grassi (NYU)	Practical Algebraic Renormalization
5:10 - 5:30	Adrian Ghinculov (UCLA)	Electroweak two-loop corrections: Reduction and evaluation of massive graphs
5:30 - 6:00	Dirk Kreimer (Mainz)	Polylogarithms, Knots and Feynman Diagrams

Friday, September 15, 2000, 9 am -- 12:30 pm: Electroweak Physics II and Beyond the Standard Model II

Chair: Thomas Rizzo (SLAC)

TIME	SPEAKER	TITLE
9:00 - 9:20	Ralf Prigl (BNL)	Recent Experimental Results for g-2
9:20 - 9:50	Bill Marciano (BNL)	Theoretical Implications of g-2
9:50 - 10:10	Zvi Bern (UCLA)	Perturbative Quantization of Gravity Theories
10:10 - 10:30	Wolfgang Hollik (Karlsruhe)	2-loop electroweak contributions to Δ_r
10:30 - 11:00	COFFEE BREAK	
11:00 - 11:20	John Gunion (UC Davis)	Do precision electroweak constraints guarantee e+e- collider discovery of at least one Higgs boson of a two-Higgs-doublet model?
11:20 - 11:40	Stephen Martin (Northern Illinois)	Constraints on ultraviolet stability of gauge couplings in realistic supersymmetric models
11:40 - 12:00	Carlos Wagner (ANL)	Electroweak Baryogenesis in the MSSM
12:00 - 12:30	Joe Lykken (Fermilab)	A practical guide to higher dimensional quantum gravity

Friday, September 15, 2000, 2:30 -- 6 pm: Precision Physics at Future Colliders and Conference Summary

Chair: Michael Peskin (SLAC)

TIME	SPEAKER	TITLE
2:30 - 3:00	Francois Charles (Strasbourg)	Precision Physics at the LHC
3:00 - 3:20	Doreen Wackerroth (Rochester)	Theoretical challenges for a precision measurement of the W mass at hadron colliders
3:20 - 3:50	Tim Barklow (SLAC)	WW Physics at Present and Future e+e- Colliders
3:50 - 4:20	COFFEE BREAK	
4:20 - 4:50	David Rainwater (Fermilab)	Precision Higgs Physics at the NLC
4:50 - 5:10	Jens Erler (U. Penn.)	Physics Impact of a Giga Z
5:10 - 5:50	Johann Kuehn (Karlsruhe)	Conference Summary