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Sunday, October 23, 2005

9:00 AM–6:00 PM

Satellite Meeting: Heavy Ion Physics at the LHC
Ortiz Ballroom, Hilton Hotel

4:00 PM–9:00 PM

Conference Registration
Promenade, Hilton Hotel

7:00 PM–9:00 PM

Conference Welcome Reception
Mesa Ballroom, Hilton Hotel

Monday, October 24, 2005

Plenary Session #1

All plenary sessions on main floor, Sweeney Convention Center

Chair: Itzhak Tserruya, Weizmann Inst.

8:45 AM–9:45 AM

I. Welcome Session

Peter D. Barnes—Welcome to Sante Fe and PANIC
Thomas J. Bowles, Los Alamos National Laboratory
Willem T.H. van Oers, Univ. Manitoba, IUPAP Representative
Martin D. Cooper—Welcome and General Instructions

9:45 AM–10:15 AM
(25 + 5 min)

II. Conference Introduction

William Marciano, BNL
Electroweak Physics: Status and Outlook

10:15 AM–10:45 AM

Coffee Break

Chair: Piermaria Odonne, Fermilab

10:45 AM–11:15 AM
(25 + 5 min)

Martin Savage, Univ. of Washington
Quantum Chromodynamics: Status and Challenges

11:15 AM–11:45 AM
(25 + 5 min)

Angela Olinto, Univ. of Chicago
Astrophysics: New Cosmic Rays at the Highest Energies

III. Strong Interactions and QCD

11:45 AM–12:15 PM
(25 + 5 min)

David A. Kosower, Saclay
QCD at the Dawn of the LHC Era

12:15 PM–2:30 PM
12:30 PM

Lunch Break, local restaurants

Student Program begins, Ortiz Room, Hilton

2:30 PM–4:00 PM

Parallel Session #1

4:00 PM–4:30 PM

Coffee Break

4:30 PM–6:00 PM

Parallel Session #2

8:00 PM–10:30 PM

International Forum—Anasazi Ballroom, Eldorado Hotel

Chair: Sally Dawson, BNL

Physics at High Energies—Vision for the Future

Piermaria Oddone, Director, Fermi Lab

Fumihiko Takasaki, Vice Director IPNS/Head of Linear Collider Project
Office, KEK

Albrecht Wagner, Director, DESY

Samuel Aronson, Associate Director, BNL

Tuesday, October 25, 2005

Plenary Session #2

All plenary sessions on main floor, Sweeney Convention Center

III. Strong Interactions and QCD, cont.

Chair: Ken'ichi Imai, Univ. of Kyoto

9:00 AM–9:30 AM

(25 + 5 min)

Chris T. Sachrajda, Univ. of Southampton

Lattice Flavor Dynamics

9:30 AM–10:00 AM

(25 + 5 min)

Krishna Rajagopal, MIT

Phases of QCD

10:00 AM–10:30 AM

(25 + 5 min)

James Nagle, Univ. of Colorado

Search for the Quark Gluon Plasma: Status

10:30 AM–11:00 AM

Coffee Break

IV. Electro-Weak Interactions

Chair: Albrecht Wagner, DESY

11:00 AM–11:30 AM

(25 + 5 min)

Michael Ramsey-Musolf, CalTech

Probing the Fundamental Symmetries of the Early Universe

11:30 AM–11:55 AM

(20 + 5 min)

David DeMille, Yale University

Search for the Electric Dipole Moment of the Electron

11:55 AM–12:25 PM

(25 + 5 min)

Bradley Filippone, CalTech

Tests of Fundamental Symmetries with Neutrons

12:25 PM–2:30 PM

Lunch Break, local restaurants

2:30 PM–4:00 PM

Parallel Session #3

4:00 PM–4:30 PM

Coffee Break

4:00 PM–6:30 PM

Poster Session and Reception (Wine and Cheese)

8:00 PM–10:00 PM

Public Science Lecture, Lentic Theater

Chair: Robert A. Eisenstein, Santa Fe

Wendy L. Freeman, Carnegie Observatories, Pasadena CA

The Accelerating Universe

Wednesday, October 26, 2005

Plenary Session #3

All plenary sessions on main floor, Sweeney Convention Center

III. Strong Interactions and QCD, cont.

Chair: Walter F. Henning, GSI

9:00 AM–9:30 AM

(25 + 5 min)

Urs Achim Wiedemann, CERN

Heavy Ion Collisions at RHIC and at the LHC: Physics Challenges

9:30 AM–10:00 AM

(25 + 5 min)

Naohito Saito, Univ. of Kyoto

Nucleon Structure: Spin Content

10:00 AM–10:30 AM

(25 + 5 min)

Douglas H. Beck, Univ. of Illinois

Contributions of Strange Quarks to Proton Structure

10:30 AM–10:50 AM

Coffee Break

IV. Electro-Weak Interactions, cont.

Chair: Torleif Ericson, CERN

10:50 AM–11:20 AM

(25 + 5 min)

Boris Kayser, Fermilab

Status and New Opportunities in Neutrino Physics

11:20 AM–11:45 AM

(20 + 5 min)

William C. Louis III, Los Alamos National Laboratory

New Results in Neutrino Measurements

11:45 AM–12:10 PM

(20 + 5 min)

Marina Artuso, Univ. of Syracuse

SM and Beyond: Clues from Recent Charm Measurements

12:10 PM–6:00 PM

Lunch Break and Free Afternoon

Conference Excursions

Buses depart at 12:45 PM sharp

Thursday, October 27, 2005

Plenary Session #4

All plenary sessions on main floor, Sweeney Convention Center

V. Astrophysics and Cosmology

Chair: Samuel Aronson, BNL

9:00 AM–9:30 AM

(25 + 5 min)

Mark Trodden, Univ. of Syracuse

Connecting Dark Energy and Fundamental Physics

9:30 AM–9:55 AM

(20 + 5 min)

Daniel S. Akerib, Case Western Reserve University

Dark Matter: Search for WIMPS

9:55 AM–10:25 AM

(25 + 5 min)

Peter Gorham, Univ. of Hawaii

*New Prospects for Detection of the Highest Energy
Cosmogenic Neutrinos*

10:25 AM–10:55 AM

Coffee Break

IV. Electro-Weak Interactions, cont.

Chair: Anthony Thomas, Jefferson Lab

10:55 AM–11:20 AM

(20 + 5 min)

Jeffrey D. Richman, UC Santa Barbara

Rare and Semileptonic Decays of B and K Mesons

11:20 AM–11:45 AM

(20 + 5 min)

Kazuo Abe, KEK

CP Violation in B Decays: Status of the Unitarity Triangle

11:45 AM–12:10 PM

(20 + 5 min)

Abolhassan Jawahery, Univ. of Maryland

CP Violation in B Decays: Search for Physics Beyond the SM

12:10 PM–2:30 PM

Lunch Break, local restaurants

2:30 PM–4:00 PM

Parallel Session #4

4:00 PM–4:30 PM

Coffee Break

4:30 PM–6:00 PM

Parallel Session #5

6:30 PM–7:30 PM

Conference Reception—Anasazi Ballroom, Eldorado Hotel

7:30 PM–10:30 PM

Conference Banquet—Pavilion Ballroom, Eldorado Hotel

Speaker—Eric Blinman,

Office of Archaeological Studies, Museum of New Mexico

*Florescence and Crash: Highlights of Environmental
and Cultural History in the Southwest*

Friday, October 28, 2005

Plenary Session #5 and 6

All plenary sessions on main floor, Sweeney Convention Center

Plenary Session #5

III.–IV. Strong and Electroweak Interactions, cont.

Chair: Mark Strikman, Penn State Univ.

9:00 AM–9:25 AM
(20 + 5 min)

Evelyn Thomson, Univ. of Pennsylvania
Progress in Top Quark Physics

9:25 AM–9:55 AM
(25 + 5 min)

Matthew Strassler, Univ. of Washington
String Theory: Making Contact with Hadron Physics

9:55 AM–10:25 AM

Coffee Break

Chair: J. David Bowman, Los Alamos National Lab.

10:25 AM–10:50 AM
(20 + 5 min)

Markus Diehl, DESY
Generalized Parton Distributions: Recent Results

10:50 AM–11:15 AM
(20 + 5 min)

Frithjof Karsch, BNL
Lattice QCD at High Temperature and the QGP

11:15 AM–11:45 AM
(25 + 5 min)

Reinhard A. Schumacher, Carnegie Mellon University
Experimental Pentaquark Searches: Current Status

11:45 AM–1:30 PM

Lunch Break, local restaurants

Plenary Session #6

VI. New Facilities

Chair: Janet Conrad, Columbia University

1:30 PM–2:00 PM
(25 + 5 min)

Tomofumi Nagae, KEK
The Physics Program at J-PARC

2:00 PM–2:30 PM
(25 + 5 min)

Albert De Roeck, CERN
Physics Opportunities at the Large Hadron Collider

2:30 PM–3:00 PM
(25 + 5 min)

JoAnne L. Hewett, SLAC
Physics at the High Energy Frontier

3:00 PM–3:30 PM

Coffee Break

3:30 PM–4:30 PM

Closing Session of Conference

Peter Barnes and Martin Cooper, Final Remarks

4:30 PM–5:00 PM

Final Coffee Break



Saturday, October 29, 2005

9:00 AM–5:00 PM

**RHIC Satellite Meeting: Physics Opportunities and
Accelerator Challenges**

Mesa Ballroom, Hilton Hotel

9:00 AM–5:45 PM

Neutrino Satellite Meeting: Future of Neutrino Physics

Mesa Ballroom, Hilton Hotel



Sunday, October 30, 2005

9:00 AM–5:00 PM

**RHIC Satellite Meeting: Physics Opportunities and
Accelerator Challenges, cont.**

Mesa Ballroom, Hilton Hotel

9:00 AM–5:00 PM

**Neutrino Satellite Meeting: Future of Neutrino Physics,
cont.**

Mesa Ballroom, Hilton Hotel

Layout of Parallel Sessions

by subject (shades), date (columns), and location (rows)

		PS#1 10/24	PS#2 10/24	PS#3 10/25	PS#4 10/27	PS#5 10/27
		2:30 - 4:00	4:30 - 6:00	2:30 - 4:00	2:30 - 4:00	4:30 - 6:00
#1	Sweeney, Main Floor	I.1	I.3	I.5	I.7	I.9
#2	Sweeney, Meeting 1	I.2	I.4	I.6	I.8	X.1
#3	Hilton, Mesa A	II.1	II.2	II.3	II.4	II.5
#4	Sweeney, Meeting 2	III.1	III.3	III.5	III.6	III.7
#5	Sweeney, Meeting 3	III.2	III.4	VII.1	VII.2	VII.3
#6	Sweeney, Meeting 4	IV.1	IV.3	IV.5	IV.6	IV.7
#7	Sweeney, Meeting 5	IV.2	IV.4	IX.1	IX.2	IX.3
#8	Hilton, Mesa B	V.1	V.2	V.3	V.4	V.5
#9	Hilton, Mesa C	VI.1	VI.2	VI.3	VI.4	VI.5
#10	Eldorado, Anasazi South	VIII.1	VIII.2			
#11	Eldorado, Zia B			VIII.3	VIII.4	VIII.5
#12	Eldorado, Zia C					
#13	Eldorado, Anasazi North	XI.1	XI.2			
#14	Eldorado, Zia A			XI.3	XI.4	XI.5
#15	Hilton, Ortiz	XII.1	XII.2	XII.3	XII.4	XII.5

#	Section Title	#	Section Title
I.1	Quarkonia	V.5	SUSY/New Physics
I.2	High- p_T and High- p_T Correlations—I	VI.1	Symmetry Tests from Kaon Decays—I
I.3	Heavy Flavor	VI.2	Symmetry Tests from Kaon Decays (—II) and Higgs Sector
I.4	Hadronization, Forward Physics, and Future Facilities	VI.3	Charm Mixing, B_s Mixing, and Lepton Flavor Violation
I.5	QGP Thermodynamics and Dense Quark Matter	VI.4	Rare B Decays
I.6	High- p_T and High- p_T Correlations—II	VI.5	CP Violation in B Decays and Constraints on New Physics
I.7	Collision Dynamics, Correlations, and Fluctuations	VII.1	EDM of Electrons, Muons, Neutrons, Atoms
I.8	Collision Dynamics, Particle Spectra, and Strangeness	VII.2	Fundamental Measurements in Atomic and Molecular Physics
I.9	Electromagnetic Probes	VII.3	Neutron Lifetime and Beta Decay
II.1	Gluon Saturation	VIII.1	Short Baseline Oscillations
II.2	Confinement/Chiral Symmetry	VIII.2	Double Beta Decay and Underground Laboratories
II.3	Lattice Calculations	VIII.3	Accelerator and High Energy Neutrinos
II.4	Experimental Results—I	VIII.4	Neutrino Theoretical Developments
II.5	Experimental Results—II	VIII.5	Solar, Reactor, and Other Neutrinos
III.1	Strangeness Content and Form Factors—I	IX.1	Overview and Muon Decay Parameters
III.2	PDFs from Small to Large x —I	IX.2	Muon Lifetime and Capture
III.3	Form Factors—II	IX.3	Lepton Flavor Violation
III.4	PDFs from Small to Large x —II	X.1	Theoretical Topics
III.5	Flavor Decomposition and GPDs	XI.1	Dark Matter and Cosmology: Neutrinos—I
III.6	Transverse Spin—I	XI.2	Dark Matter and Cosmology: Neutrinos—II
III.7	Fragmentation and Transverse Spin—II	XI.3	Dark Matter and Cosmology: Gamma Rays—I
IV.1	Hypernuclei and Bound Kaons	XI.4	Dark Matter and Cosmology: Gamma Rays—II
IV.2	Nuclei	XI.5	Ultra-High-Energy Cosmic Rays
IV.3	Exotics/Spectroscopy	XII.1	New Accelerator Facilities—I
IV.4	Pentaquarks	XII.2	New Accelerator Facilities—II
IV.5	Strange Quarks	XII.3	New Detector Systems—Silicon Detectors
IV.6	General Talks—I	XII.4	New Detector Systems—Particle ID and Trigger Detectors
IV.7	General Talks—II	XII.5	New Detector Systems—Underground Systems
V.1	Bottom Physics		
V.2	Charm Physics		
V.3	Quarkonium Physics		
V.4	Top Physics		

Parallel Session #1—Monday, October 24

Section I.1: Quarkonia

Room: Sweeney Main Floor; Chair: Thomas Ulrich

- 2:30 Gianluca Usai
Results from NA60 Experiment
- 3:00 Saumen Datta
Lattice Results on Behavior of Quarkonia in a Gluonic Plasma
- 3:15 David Blaschke
Charmonium in Medium and at RHIC
- 3:30 Vince Cianciolo
J/ψ Production in p+p, d+Au, and Cu+Cu Collisions at RHIC
- 3:45 Taku Gunji
Measurements of J/ψ yields at Forward Rapidity and Mid-Rapidity in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV by PHENIX at RHIC

Section I.2: High- p_T and High- p_T Correlations—I

Room: Sweeney Meeting 1; Chair: Helen Caines

- 2:30 Henner Buesching
Systematic Study of Particle Production at High p_T with the PHENIX Experiment at RHIC
- 2:45 Wolf Holzmann
What do Azimuthal Angular Correlation Measurements Tell Us about sQGP Production at RHIC?
- 3:00 Jana Bielcikova
Aximuthal Correlations of High p_T Neutral Strange Baryons and Mesons at RHIC
- 3:15 Tadaaki Isobe
Measurements of High- p_T Neutral Mesons in $\sqrt{s_{NN}} = 200$ GeV Au+Au and Cu+Cu Collisions at RHIC-PHENIX
- 3:30 Selemon Bekele
High p_T Suppression in Cu+Cu Collisions at $\sqrt{s_{NN}} = 200$ GeV at RHIC
- 3:45 Lijuan Ruan
Identified Particle Transverse Momentum Distributions up to 12 GeV/c from Au+Au and Cu+Cu Collisions at $\sqrt{s_{NN}} = 200$ GeV

Section II.1: Gluon Saturation

Room: Hilton Mesa A; Chair: Alex Kovner

- 2:30 Heribert Weigert
Of Colored Glass and Saturation Scales
- 3:00 Ian Balitsky
High-Energy Effective Action from Scattering of QCD Shock Waves
- 3:15 Yoshitaka Hatta
Effective Hamiltonian for QCD Evolution at High Energy
- 3:30 Mark Strikman
Two-Scale Transverse Structure of the Nucleon and Central pp Collisions at LHC
- 3:45 Christian Weiss
Transverse Parton Structure of the Nucleon and the Black-Disk Limit in High-Energy Scattering

Section III.1: Strangeness Content and Form Factors—I

Room: Sweeney Meeting 2; Chair: Dave Gaskell

- 2:30 Dan Riska
The $s\bar{s}$ Component of the Proton and the Strangeness Magnetic Moment
- 3:00 Jianglai Liu
Results from the G0 Forward Angle Measurement
- 3:15 Stephen Pate
Strangeness Contribution to the Electromagnetic and Axial Form Factors of the Nucleon: Combined Analysis of G0, HAPPEX and Brookhaven E734 Data
- 3:30 Hrayr Matevosyan
Physical Nucleon Form Factors from Lattice QCD
- 3:45 Ricardo Alarcon
The Charge Form Factor of the Neutron at Low Q^2

Section III.2: PDFs from Small to Large x —I

Room: Sweeney Meeting 3; Chair: Emlyn Hughes

- 2:30 Werner Vogelsang
The Relevance of Gluon Polarization to Our Understanding of Nucleon Structure
- 3:00 Yoshinori Fukao
The Overview of the Spin Physics at RHIC-PHENIX Experiment
- 3:15 Stephane Platchkov
Nucleon Spin and Structure Studies with COMPASS
- 3:30 Joanna Koryluk
Measurement of the Double Longitudinal Spin Asymmetry in Inclusive Jet Production in Polarized p+p Collisions at $\sqrt{s_{NN}} = 200$ GeV

Section IV.1: Hypernuclei and Bound Kaons

Room: Sweeney Meeting 4; Chair: Craig Dukes

- 2:30 Hyoung Bhang
Three Body Weak Interaction Process in the Decay of Lambda Hypernuclei
- 2:45 Withdrawn
- 3:00 Joerg Reinhold
Spectroscopy of Light to Medium Mass Lambda Hypernuclei
- 3:15 Haruhiko Ota
Non-Mesonic and Mesonic Weak Decay of $^5_{\Lambda}\text{He}$
- 3:30 Maurizio Palomba
The FINUDA Experiment: A New Powerful Laboratory for Studies on Strangeness in Nuclear Matter
- 3:45 Gianni Garbarino
Recent Theoretical Progress in Hypernuclear Decay

Section IV.2: Nuclei

Room: Sweeney Meeting 5; Chair: Tadafumi Kishimoto

- 2:30 Yordanka Ilieva
A Comprehensive Study of the Reaction $\gamma d \rightarrow \pi^0 d$
- 2:45 Giovanni Salmè
Time and Space-Like Pion Form Factor and Fock State Components

- 3:00 Kim Egnyan
Measurement of 2- and 3-Nucleon Short Range Correlation Probabilities in Nuclei
- 3:15 Eli Friedman
Elastic Scattering of Low Energy Pions by Nuclei and the In-Medium Isovector π -N Amplitude
- 3:30 David Gaskell
Precise Measurement of the EMC Effect in Light Nuclei
- 3:45 Mikhail Bashkanov
Large Sigma-Channel Low-Mass Enhancement in Exclusively Measured Double Pionic Fusion to He

Section V.1: Bottom Physics

Room: Hilton Mesa B; Chair: Chris Tully

- 2:30 Vincenzo Cirigliano
Factorization in Exclusive Semileptonic Radiative B decays
- 2:45 Jennifer Pursley
Studies of Orbitally Excited B** and D**s Mesons at CDF and D0
- 3:00 Dmitri Tsbychev
Properties of the B_c Meson
- 3:15 Tulay Donszelmann
Rare B Meson Decays at Collider Experiments
- 3:30 Chung-Hsiang Wang
Hadronic B Decays at Belle and Babar
- 3:45 Victor Pavlunin
Y(5S) Results from CLEO

Section VI.1: Symmetry Tests from Kaon Decays—I

Room: Hilton Mesa C; Chair: Owen Long

- 2:30 Edoardo Mazzucato
Recent Results on Direct CP Violation and Charged Kaon Decays with the NA48/2 Experiment
- 2:45 Michal Szeleper
NA48 Extraction of V_{us} from Kaon Decays and SM Test from K_{m3}/K_{e3}
- 3:00 Rune Niclasen
Probing the Structure of Light Mesons from Direct Measurements of Rare Electromagnetic Kaon and Pion Decays
- 3:15 Peter Cooper
New Results from BNL E949 on Ultra-Rare Kaon and Pion Decays
- 3:30 Paolo Turchetti
Rare Kaon Meson Decays on the Lattice
- 3:45 Naoto Tsutsui
Kaon Semileptonic Decay Form Factors from Lattice QCD

Section VIII.1: Short Baseline Oscillations

Room: Eldorado Anasazi South; Chair: Steve Brice

- 2:30 Janet Conrad
Neutrino Cross Section Studies at MiniBooNE
- 2:45 Zelimir Djurcic
Study of the Backgrounds to Neutrino Appearance Signal at MiniBooNE

- 3:00 Morgan Wascko
Antineutrino Running at MiniBooNE
- 3:15 Robert Nelson
Constraining the Kaon Content in the MiniBooNE Secondary Beam with the Little Muon Counter
- 3:30 Alexis Aguilar-Arevalo
Neutrinos from the NuMI Beamline in MiniBooNE
- 3:45 Silvia Borghi
Results from the HARP Experiment

Section XI.1: Dark Matter and Cosmology: Neutrinos—I

Room: Eldorado Anasazi North; Chair: Gus Sinnis

- 2:30 Spencer Klein
First Results from IceCube
- 3:00 Peter Gorham
Initial Results and Status of the ANITA Cosmogenic Neutrino Discovery Experiment
- 3:30 Kevin Reil
SalSA: A Tera-ton UHE Neutrino Detector
- 3:45 Paolo Desiati
Neutrino Astronomy at the South Pole: Latest Results from the AMANDA-II Neutrino Telescope

Section XII.1: New Accelerator Facilities—I

Room: Hilton Ortiz; Chair: Thomas Roser

- 2:30 Leigh Harwood
Upgrading the CEBAF Accelerator to 12 GeV
- 2:45 Wolfram Fischer
RHIC Upgrades for Heavy Ions and Polarized Protons
- 3:00 Vadim Ptitsyn
eRHIC—Future Electron-Ion Collider at BNL
- 3:15 Renee Fatemi
A Conceptual Detector Design for eRHIC
- 3:30 Lars Schmitt
The FAIR Project: Status and New Developments

Parallel Session #2—Monday, October 24

Section I.3: Heavy flavor

Room: Sweeney Main Floor; Chair: Thomas Ullrich

- 4:30 Ramona Vogt
QCD Predictions for Charm and Bottom Production at RHIC
- 4:45 Xiaorong Wang
Open Heavy Flavor Production as a Probe of Nuclear Effects and High Density Matter in pp, dAu and AA Collisions at $\sqrt{s_{NN}} = 200$ GeV
- 5:00 Zhangbu Xu
Open Charm Production in $\sqrt{s_{NN}} = 200$ GeV Au+Au Collisions
- 5:15 Andrea Dainese
Heavy-Quark Energy Loss at RHIC and LHC

- 5:30 Hendrik van Hees
Thermalization and Flow of Heavy Quarks in the Quark Gluon Plasma
- 5:45 Richard Witt
A Complete Onium Program with R2D at RHIC II

Section I.4: Hadronization, Forward Physics, and Future Facilities

Room: Sweeney Meeting 1; Chair: Claude Pruneau

- 4:30 Thomas Falter
Hadronization in Nuclear Deep Inelastic Scattering and Ultra-Relativistic Heavy-Ion Collisions
- 4:45 J.H. Lee
Particle Suppression at Large x_p at RHIC
- 5:00 Rachid Nouicer
Global Observables from Au+Au, Cu+Cu, d+Au and p+p Collisions at RHIC Energies
- 5:15 Chun Zhang
Study Nuclear Modification at Forward Rapidity via Two Particle Correlations in $\sqrt{s_{NN}} = 200$ GeV
- 5:30 Mark Strikman
Quark-Gluon Densities in the Nuclear Fragmentation Region in Heavy Ion Collisions at LHC
- 5:45 Helio Takai
ATLAS Detector Heavy Ion Physics Program

Section II.2: Confinement/Chiral Symmetry

Room: Hilton Mesa A; Chair: Ian Balitsky

- 4:30 Adriano Di Giacomo
Confinement of Color: Open Problems and Perspectives
- 5:00 Alex Kovner
Approaching Continuum Monopoles
- 5:15 Mandar Bhagwat
Analysis of Full-QCD and Quenched-QCD Lattice Propagators
- 5:30 Hideko Nagahiro
 η' -Mesic Nuclei Formation and $U_A(1)$ Anomaly at Finite Density
- 5:45 Fumiko Okiharu
Multi-Quarks and Two-Baryon Interaction in Lattice QCD

Section III.3: Form Factors—II

Room: Sweeney Meeting 2; Chair: Ricardo Alarcon

- 4:30 Michael Kohl
The Proton Electric to Magnetic Form Factor Ratio at Low Q^2
- 4:45 Yu-Chun Chen
Two-Photon Exchange Contribution to the Elastic e-p Scattering at Large Momentum Transfer
- 5:00 Sergey Kondratyuk
Two-Photon Exchange in Elastic and Inelastic Electron-Proton Scattering
- 5:15 Victor Mokeev
Nucleon Resonance Studies in Phenomenological Analysis of Recent CLAS Data on Double Charged Pion Photo- and Electroproduction off Proton
- 5:30 Peter Zweber
Electromagnetic Form Factor of the Proton, Pion, and Kaon for $Q^2 = 13.48$ GeV²

- 5:45 Areg Danagoulian
Measurements of Real Compton Scattering Cross Sections at Jefferson Lab

Section III.4: PDFs from Small to Large x —II

Room: Sweeney Meeting 3; Chair: Abhay Deshpande

- 4:30 Jan Nassalski
Recent Results on the Polarisation of Gluons from COMPASS Experiment
- 4:45 Kieran Boyle
Neutral Pion Double Longitudinal Spin Asymmetry in Proton-Proton Collisions at $\sqrt{s_{NN}} = 200$ GeV
Using the PHENIX Detector
- 5:00 Ming Liu
Probing the Gluon Polarization with the Helicity Asymmetry in J/ψ Production in Longitudinally Polarized $p+p$ Collisions at $\sqrt{s} = 200$ GeV/c
- 5:15 Cynthia Keppel
Measurements of Separated Structure Functions and Moments on Nucleons and Nuclei
- 5:30 Ian Dawson
Structure Function Measurements at the LHC
- 5:45 Arie Bodek
A Unified Model for Inelastic e-N and ν -N Cross Sections

Section IV.3: Exotics/Spectroscopy

Room: Sweeney Meeting 4; Chair: Craig Dukes

- 4:30 Mina Nozar
Partial Wave Analysis of the $\pi^+\pi^+\pi^-$ System in Photo-Production at CLAS
- 4:45 Ray Cowan
Neutrino Interactions with Nucleons and Nuclei at Intermediate Energies
- 5:00 M. Döring
Chiral Unitary Approach for the $\gamma p \rightarrow \pi^0 \eta p$ and $\pi^0 K^0 \Sigma^+$ Reactions
- 5:15 Oleg Kamaev
Study of the Decay $\Omega^- \rightarrow \Xi^- \pi^+ \pi^-$ in the HyperCP Experiment
- 5:30 Eulogio Oset
Evidence for Two States of the $\Lambda(1405)$ Resonance
- 5:45 Choki Nakamoto
 $\Lambda(1405)$ in a Hybrid Quark Model

Section IV.4: Pentaquarks

Room: Sweeney Meeting 5; Chair: Tadafumi Kishimoto

- 4:30 Jan Friedrich
Hadron Spectroscopy in Photo- and Hadroproduction at COMPASS
- 4:45 Yi Qiang
Search for the Pentaquark Partners: Θ^{++} , Σ^0 and N^0
- 5:00 Kenichi Imai
Search for Exotic Hadrons, H-Dibaryon Resonance and Pentaquark
- 5:15 Xin Chen
Hadron Spectroscopy and Pentaquark Searches at BaBar
- 5:30 Mark Paris
Variational Monte Carlo Study of Pentaquark States

- 5:45 Atsushi Hosaka
Production and Decay of Pentaquarks

Section V.2: Charm Physics

Room: Hilton Mesa B; Chair: Matthew Herndon

- 4:30 Conrado Albertus
Strong One-Pion Decay of Ground State Charmed Baryons
- 4:45 Eric Vaandering
Genetic Programming Search for Doubly Cabibbo Suppressed Decays of Λ_c^+ and D_s^+
- 5:00 Maurizio Lo Vetere
New Charm Spectroscopy
- 5:15 Werner Sun
D Hadronic Branching Fractions
- 5:30 Alexey Petrov
X(3872): Hadronic Molecules in Effective Field Theory
- 5:45 Alexander Rakitin
Measurement of the Dipion Mass Spectrum in the Decay X(3872) to $J/\psi, \pi^+\pi^-$

Section VI.2: Symmetry Tests from Kaon Decays II and Higgs Sector

Room: Hilton Mesa C; Chair: Paoti Chang

- 4:30 Michael Hasinoff
Search for T-Violation in Stopped Kaon Decay
- 4:45 Edmond Dukes
Search for CP Violation in Hyperon Decays with the HyperCP Spectrometer at Fermilab
- 5:00 Ben Kilminster
Searches for the Standard Model and the MSSM Higgs Bosons Production
- 5:15 Hyunwoo Kim
D0 Search for the Standard Model Higgs Boson
- 5:30 Alexander Melnitchouk
D0 Search for the Higgs Boson in Multijet Events
- 5:45 Gennady Kozlov
On Heavy Quarkonia and New Higgs Physics Effect—Theory and Phenomenology

Section VIII.2: Double Beta Decay and Underground Laboratories

Room: Eldorado Anasazi South; Chair: Kevin Lesko

- 4:30 Victor Gehman
The Majorana Project: A Next-Generation Double-Beta Decay Experiment
- 4:45 Luciano Pandola
GERDA, the GERmanium Detector Array for the Search of Neutrinoless Double Beta Decay in GE-76
- 5:00 Eric Norman
Prospects for CUORE and Latest Results from CUORICINO
- 5:15 Dongming Mei
The Depth-Sensitivity Relation (DSR) for Underground Laboratories
- 5:30 Andrew Hime
DEAP and CLEAN Detectors for Low Energy Particle Astrophysics

Section XI.2: Dark Matter and Cosmology: Neutrinos—II

Room: Eldorado Anasazi North; Chair: Gus Sinnis

- 4:30 Andrew Steiner
Phases of Dense Quark Matter and Compact Objects
- 4:45 Michael Dragowsky
Cryogenic Dark Matter Search Experiment: Latest Results and Status
- 5:00 Huan Lin
The Dark Energy Survey
- 5:15 Richard Hasty
Status of the XENON Direct Dark Matter Detection Experiment
- 5:30 Maxwell Chertok
Search for Dark Matter Annihilations in Draco
- 5:45 Arthur Kosowsky
The Atacama Cosmology Telescope Project
- 6:00 Emil Mottola
Dark Energy and Condensate Stars

Section XII.2: New Accelerator Facilities—II

Room: Hilton Ortiz; Chair: Thomas Roser

- 4:30 Deepak Raparia
Design of the AGS Upgrade for a Broad Band Neutrino Superbeam
- 4:45 Michael Syphers
U.S. Participation in the LHC—Commissioning and Upgrades
- 5:00 Tatsuya Kageyama
The SuperKEKB Project
- 5:15 Manfred Daum
The Ultracold Neutron Facility at PSI: A Status Report
- 5:30 Peter Fierlinger
Deuterium for Ultracold Neutron Sources
- 5:45 Peter Fierlinger
Diamond-Like Carbon for Ultracold Neutrons

Parallel Session #3—Tuesday, October 25

Section I.5: QGP Thermodynamics and Dense Quark Matter

Room: Sweeney Main Floor; Chair: David Blaschke

- 2:30 Jorgen Randrup
Baryon-Strangeness Correlations as a Diagnostic Tool
- 2:45 Ismail Zahed
Susceptibilities in sQGP
- 3:00 Christian Schmidt
QCD Thermodynamics with an Almost Realistic Quark Mass Spectrum

- 3:15 Claudia Ratti
Phases of QCD: Lattice Thermodynamics and a Field Theoretical Model
- 3:30 Kenji Fukushima
Phase Diagram and Instability of Dense Neutral Three-Flavor Quark Matter
- 3:45 Hiroaki Abuki
Thermal Unpairing Transitions Affected by Neutrality Constraints and Chiral Dynamics

Section I.6: High- p_T and High- p_T Correlations—II

Room: Sweeney Meeting 1; Chair: Saskia Mioduszewski

- 2:30 David Winter
PHENIX Measurement of Particle Yields at High p_T with Respect to Reaction Plane in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV
- 2:45 Jiangyong Jia
Systematic Study of the Medium Modification of the Away-Side Jet in AuAu/CuCu Collisions in PHENIX
- 3:00 Joern Putschke
Near-Side Delta eta Correlations of High- p_T Hadrons from STAR
- 3:15 Nuggehalli Ajitanand
Probes of Jet Topology Using Two- and Three-Particle Azimuthal Correlations
- 3:30 Mark Horner
Systematic Study of Azimuthal Charged Di-Hadron Correlations in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV from the STAR Experiment
- 3:45 Jan Rak
Partonic Transverse Momentum k_T and the Fragmentation

Section II.3: Lattice Calculations

Room: Hilton Mesa A; Chair: Alex Kovner

- 2:30 Timo Lahde
Partially Quenched Chiral Perturbation Theory to NNLO
- 2:45 Maria Parappilly
Scaling Behavior of Quark Propagator in Full QCD
- 3:00 Massimiliano Procura
Quark Mass Dependence of Nucleon Observables and Lattice QCD
- 3:15 Ting-Wai Chiu
 f_D and f_{D_s} in Lattice QCD with Exact Chiral Symmetry
- 3:30 Takumi Doi
Meson-Meson and Meson-Baryon Interactions in Lattice QCD
- 3:45 Toru Takahashi
Nuclear Force in Lattice QCD

Section III.5: Flavor Decomposition and GPDs

Room: Sweeney Meeting 2; Chair: Dave Gaskell

- 2:30 Harold Jackson, Jr.
Measurement of ΔS in the Nucleon at HERMES from Semi-Inclusive DIS
- 2:45 S. Kumano
Global Analysis for Determining Polarized Parton Distribution Functions in the Nucleon

- 3:00 Paul Reimer
Opportunities with Drell-Yan Scattering: Probing the Sea Quark Distributions of the Proton
- 3:15 Ernst Sichtermann
Spin Physics with Ws at RHIC
- 3:30 Elke Aschenauer
New Results on Deeply Virtual Compton Scattering at HERMES
- 3:45 Jeroen Dreschler
Exclusive Meson Production at HERMES

Section IV.5: Strange Quarks

Room: Sweeney Meeting 4; Chair: Curtis Meyer

- 2:30 Hidekatsu Nemura
Study of Pentaquark and $\Lambda(1405)$
- 2:45 Masaharu Sato
Experimental Study of Strange Tribaryons in the ${}^4\text{He}(K_{\text{stop}}^-, p)$ Reaction
- 3:00 Murat Kaskulov
 $\Lambda(1520)$ and $\Sigma(1385)$ in the Nuclear Medium
- 3:15 Sourav Sarkar
Chiral Dynamics of the $\Lambda(1520)$ in Coupled Channels Tested in the $K^-p \rightarrow \pi\pi\Lambda$ Reaction
- 3:30 Ilya Narodetskiy
 Θ^+ and $\Lambda(1520)$ Production in pp Reactions at High Energies
- 3:45 Noriyoshi Ishii
Anisotropic Lattice QCD Studies of Pentaquarks and Tetraquarks

Section V.3: Quarkonium Physics

Room: Hilton Mesa B; Chair: Chris Tully

- 2:30 Stanley Radford
Recent Developments in the Modeling of Heavy Quarkonia
- 2:45 Gouranga Nayak
Fragmentation, NRQCD and Factorization in Heavy Quarkonium Production
- 3:00 David Besson
Bottomonium Spectrum and Decays
- 3:15 Hajime Muramatsu
 $\psi(3770)$ Non- $\bar{D}D$ Decays
- 3:30 Guangshun Huang
Y(2S) and J/ ψ results from CLEO
- 3:45 Kam Seth
 h_c Discovery and $\Gamma_{\gamma\gamma} X_{c2}$ from CLEO

Section VI.3: Charm Mixing, B_s Mixing, and Lepton Flavor Violation

Room: Hilton Mesa C; Chair: Owen Long

- 2:30 Werner Sun
Constraints on Charm Mixing and Doubly-Cabibbo Suppressed Decays
- 2:45 Ray Cowan
Charm Mixing at BaBar

- 3:00 Istvan Danko
CLEO Results on $\tau^+\tau^-$ and LFV decays of $Y(1,2,3S)$
- 3:15 Stephanie Menzemer
Search for B_s^0 Oscillations
- 3:30 Tulika Bose
Search for B_s^0 Oscillations and Measurement of the Lifetime Difference in the B_s^0 System
- 3:45 Vincenzo Cirigliano
Minimal Flavor Violation in the Lepton Sector

Section VII.1: EDM of Electrons, Muons, Neutrons, Atoms

Room: Sweeney Meeting 3; Chair: Jacinda Ginges

- 2:30 Vladimir Dmitriev
P- and T-Invariance Violating Nuclear Schiff Moment, New Upper Limit for the Proton Electric Dipole Moment
- 2:45 Timur Isaev
Prospective Candidates for the EDM Experiments of New Type: Calculations of Enhancement of P,T-Odd Effects in HI^+ and Liquid Xe
- 3:00 Pavel Bolokhov
Lorentz Violating Supersymmetric Quantum Electrodynamics
- 3:15 Cornelis Onderwater
Light Ion EDM Searches Using a Magnetic Storage Ring
- 3:30 Nicholas Scielzo
Electric Dipole Moment of Radium-225
- 3:45 Russell Stutz
An Electron EDM Search Using Trapped Molecular Ions

Section VIII.3: Accelerator and High Energy Neutrinos

Room: Eldorado Zia B; Chair: Steve Brice

- 2:30 Aysel Kayis Topaksu
Recent Charm Production and Neutrino Oscillation Results from the CHORUS Experiment
- 2:45 George Tzanakos
Status of the MINOS Experiment
- 3:00 Jonathan Paley
E907: Hadron Production Measurements for Neutrino Flux Calculations
- 3:15 Jorge Morfin
MINERvA: A High Statistics, Neutrino-Nucleus Scattering Experiment in the NuMI Beam at Fermilab
- 3:30 Teresa Montaruli
The ANTARES Neutrino Telescope
- 3:45 Stephan Mintz
The Production of Λ and Σ^0 Hyperons in Antineutrino-Proton Collisions

Section IX.1: Overview and Muon Decay Parameters

Room: Sweeney Meeting 5; Chair: Carl Gagliardi

- 2:30 David Hertzog
Recent Results and Future Prospects in Muon Physics

- 3:00 Wulf Fetscher
 Muon Decay: Measurement of the Transverse e^+ Polarization and its Implications on G_F (Fermi Coupling Constant) and TRI (Time Reversal Invariance)
- 3:15 Jingliang Hu
 High Precision Measurements of Muon Decay at TWIST
- 3:30 Rebecca Erwin
 Constraints on Muon Decay Parameters from Neutrino Mass

Section XI.3: Dark Matter and Cosmology: Gamma Rays—I

Room: Eldorado Zia A; Chair: Gus Sinnis

- 2:30 Paolo Coppi
 Exploring the Physics of Active Galactic Nuclei in the Era of Neutrino and Gamma-Ray Astronomy
- 3:00 Wystan Benbow
 H.E.S.S. Performance and Results
- 3:30 Trevor Weekes
 VERITAS: The Next Generation Very High Energy Gamma-Ray Telescope
- 3:45 Konstantin Protasov
 Flux of Light Antimatter Nuclei Near Earth, Induced by Cosmic Rays in the Galaxy and in the Atmosphere

Section XII.3: New Detector Systems—Silicon Detectors

Room: Hilton Ortiz; Chair: Simon Kwan

- 2:30 Gabriella Pasztor
 The CMS Silicon Tracker—Status and Challenges
- 2:45 Vito Lenti
 Status of the Construction of the ALICE Silicon Pixel Detector
- 3:00 Johann Heuser
 A High-Performance Silicon Tracker for the CBM Experiment at FAIR
- 3:15 Ping Tan
 The Status of the CMS Forward Pixel Detector
- 3:30 Patrick McGaughey
 Heavy Quark Detection with a Forward Silicon Micro-Vertex Detector in the PHENIX Experiment
- 3:45 Ralf Kaiser
 The HERMES Recoil Detector

Parallel Session #4—Thursday, October 27

Section I.7: Collision Dynamics, Correlations, and Fluctuations

Room: Sweeney Main Floor; Chair: Saskia Mioduszewski

- 2:30 Tetsufumi Hirano
 Perfect Fluidity of the sQGP Core and Dissipative Hadronic Corona
- 2:45 Alice Mignerey
 System Size and Energy Dependence of Elliptic Flow

- 3:00 Erik Johnson
Rapidity Dependence of Elliptic Flow at RHIC
- 3:15 Raul Armendariz
Evolution of Event-by-Event Transverse Energy E_T Fluctuations over Collision Centrality in RHIC Interactions
- 3:30 Claude Pruneau
Probing Collision Dynamics with Fluctuation and Correlation Studies at RHIC
- 3:45 Tuomas Lappi
Quark-Antiquark Production from Classical Fields and Chemical Equilibration

Section I.8: Collision Dynamics, Particle Spectra, and Strangeness

Room: Sweeney Meeting 1; Chair: Vince Cianciolo

- 2:30 Zoltan Fodor
New Results from NA49
- 2:45 Pawan Kumar Netrakanti
Identified Particle Transverse Momentum Spectra in p+p and d+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV
- 3:00 Helen Caines
Status of Strangeness Physics in Heavy-Ion Physics
- 3:15 Pedro Costa
Thermodynamic Properties of Quark Matter: Droplets and Strangelets Formation
- 3:30 Mark Heinz
Strangeness Production in Small and Large Collision Systems at RHIC
- 3:45 Paul Stankus
Charge Transport in High-Energy Hadron Collisions

Section II.4: Experimental Results—I

Room: Hilton Mesa A; Chair: Ian Balitsky

- 2:30 Yuji Yamazaki
The Structure of the Proton Measured at HERA
- 2:45 Xin Qian
Rosenbluth Separation of Electropion Production Cross-Section from Hydrogen and Carbon
- 3:00 Daniel Ashery
Measurement of Light-Cone Wave Functions by Diffractive Dissociation
- 3:15 Jim Pivarski
Di-Electron Widths of the $Y(1,2,3S)$ Resonances
- 3:30 Johann Marton
Experimental Studies on Kaonic Atoms at DAPHNE: Recent Results and Perspectives
- 3:45 Satoshi Yokkaichi
Observation of Vector Meson Modification in 12-GeV p+A Interaction

Section III.6: Transverse Spin—I

Room: Sweeney Meeting 2; Chair: Elke Aschenauer

- 2:30 Feng Yuan
Single Spin Asymmetry and Quark Orbital Motion in Nucleon

- 2:45 Benedikt Zihlmann
Transversity Measurements at HERMES
- 3:00 Rainer Joosten
Transversity Signals in Two-Hadron Correlation at COMPASS
- 3:15 Robert Hobbs
Double Longitudinal Asymmetry in Jet k_T Measured in Di-Hadron Correlations in Polarized
p+p Collisions at $\sqrt{s} = 200$ GeV in the PHENIX Experiment at RHIC
- 3:30 Steven Heppelmann
Spin Effects in Large Rapidity Neutral Pion Production at STAR
- 3:45 Todd Averett
Recent DIS Results from JLab: A_1^n at high-x, and the Q^2 -Dependence of g_2^n

Section IV.6: General Talks—I

Room: Sweeney Meeting 4; Chair: Curtis Meyer

- 2:30 Willi Bertl
The Radiative Pion Decay Anomaly Revisited
- 2:45 Mikko Sainio
Pion-Nucleon Analysis at Low Energy
- 3:00 Hiroki Kanda
Measurement of Σ^+p Elastic Scattering Cross Sections at KEK-PS
- 3:15 Yoshikazu Maeda
Phi-Meson Production in pN Collisions Close to Threshold
- 3:30 Keitaro Nagata
The Nucleon and Roper Resonance in a Chiral Quark-Diquark Model
- 3:45 Keito Horie
Measurement of Photoproduction of Phi Mesons Near Threshold by LEPS/SPring-8 Experiment

Section V.4: Top Physics

Room: Hilton Mesa B; Chair: Matthew Herndon

- 2:30 Peter Renkel
Measurements of the Top Quark Mass in the Lepton+Jets Channel at D0 and CDF
- 2:45 Tuula Maki
Measurement of the Top Quark Mass in the Dilepton Channel at CDF
- 3:00 Robert Kehoe
Measurement of the Top Quark Pair Production Cross Section at the Tevatron
- 3:15 Charles Plager
Top Properties: W Helicity, Branching Ratios, Top Charge
- 3:30 Valentin Neuclea
Searches for Non-SM $t\bar{t}$ Production Resonances at CDF and D0
- 3:45 Yurii Maravin
Search for Single Top Quark Production at D0 and CDF

Section VI.4: Rare B Decays

Room: Hilton Mesa C; Chair: Paoti Chang

- 2:30 Karsten Koeneke
Recent Results in Electroweak Penguin B Decays from the BaBar Experiment

- 2:45 Tsung-Wen Yeh
Power Corrections and CP Phases
- 3:00 Denis Suprun
Charmless Hadronic B Decays in the Context of Flavor Symmetries
- 3:15 Ilija Bizjak
Measurement of the Matrix Element $|V_{ub}|$ at Belle
- 3:30 Romulus Godang
Measurements of the CKM Elements $|V_{ub}|$ and $|V_{cb}|$ at BaBar
- 3:45 Debabrata Mohapatra
Observation of $b \rightarrow d \gamma$

Section VII.2: Fundamental Measurements in Atomic and Molecular Physics

Room: Sweeney Meeting 3; Chair: Nikolas Scielso

- 2:30 Victor Flambaum
Effects of Variation of Fundamental Constants from Big Bang to Atomic Clocks
- 2:45 Bernhard Lauss
Precision Measurement of Parity Violation in Polarized Neutron Capture on the Proton: The NPDgamma Experiment
- 3:00 Valery Nesvizhevsky
Gravitationally Bound Quantum States of Neutrons: Applications and Perspectives
- 3:15 Jacinda Ginges
The Radiative Potential Method for Calculations of QED Radiative Corrections to Energies and E1 Amplitudes in Many-Electron Atoms: Application to Parity Nonconservation in Cesium
- 3:30 Johann Marton
Pionic Hydrogen—Precision Measurements at PSI
- 3:45 Anna Micherdzinska
Measurement of the Parity-Violating Neutron Spin Rotation in ^4He

Section VIII.4: Neutrino Theoretical Developments

Room: Eldorado Zia B; Chair: Baha Balantekin

- 2:30 S. Kumano
A Possible Nuclear Effect on the NuTeV $\sin^2\theta_w$ Anomaly
- 2:45 Nicole Bell
Magnetic Moments of Dirac Neutrinos
- 3:00 S. Sharma
Constraints on Weakly Mixed Sterile Neutrinos in the Hollanda-Smirnov Model
- 3:15 Ray Cowan
Neutrino Interactions with Nucleons and Nuclei at Intermediate Energies
- 3:30 G. Stephenson, Jr.
Neutrino Oscillation Parameters in a Six-Channel Reduced Rank Seesaw
- 3:45 Probir Roy
Deviation from Maximal Mixing of Atmospheric Muon Neutrinos via Matter Effects

Section IX.2: Muon Lifetime and Capture

Room: Sweeney Meeting 5; Chair: Carl Gagliardi

- 2:30 Dai Tomono
Precision Measurement of the Positive Muon Lifetime at RIKEN-RAL
- 2:45 Ronald McNabb
Measurement of the Muon Lifetime to 1 ppm
- 3:00 Peter Kammel
Muon Capture as a Probe of the Nucleon's Axial Structure—The MuCap Experiment
- 3:15 B. Roberts
The Muon ($g-2$) Experiment: Present and Future
- 3:30 Kim Maltman
Resolving the τ Versus Electroproduction Discrepancy for the Isovector Spectral Function and its Implications for the SM Prediction for Muon ($g-2$)

Section XI.4: Dark Matter and Cosmology: Gamma Rays—II

Room: Eldorado Zia A; Chair: Gus Sinnis

- 2:30 Peter Meszaros
High-Energy Emission from Gamma-Ray Bursts
- 3:00 Robert Johnson
The GLAST Gamma-Ray Telescope Mission
- 3:30 Curtis Lansdell
Surveying the TeV Sky with Milagro

Section XII.4: New Detector Systems—Particle ID and Trigger Detectors

Room: Hilton Ortiz; Chair: Simon Kwan

- 2:30 Quentin Ingram
The Lead Tungstate Electromagnetic Calorimeter of the CMS Detector
- 2:45 Toru Sugitate
The PHOS Detector at ALICE
- 3:00 Mickey Chiu
Calorimetry Upgrade at Forward Rapidities for the PHENIX Detector
- 3:15 Julia Velkovska
Time of Flight System for the PHENIX High- p_T Detector Upgrade
- 3:30 Kerstin Hoepfner
Physics with Muons in CMS—Potential and Challenges
- 3:45 John Lajoie
A Level-1 Muon Trigger for the PHENIX Forward Spectrometer Upgrade

Parallel Session #5—Thursday, October 27

Section I.9: Electromagnetic Probes

Room: Sweeney Main Floor; Chair: Ralf Rapp

- 4:30 Takao Sakaguchi
Direct Photon Measurement in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV at RHIC
- 4:45 Simon Turbide
Electromagnetic Signals at SPS and RHIC
- 5:00 Malgorzata Sudol
Dielectron Production in C+C Collisions with HADES
- 5:15 Dmitry Anchishkin
Pion and Quark Annihilation Mechanisms of Dilepton Production
- 5:30 Stefan Leupold
Generalized Weinberg Sum Rules, Four-Quark Condensates and Chiral Symmetry Restoration
- 5:45 Luis Alvarez Ruso
Phi Meson Propagation in a Hot Hadronic Gas

Section II.5: Experimental Results—II

Room: Hilton Mesa A; Chair: Alex Kovner

- 4:30 Sheldon Stone
CLEO Results on Leptonic and Semileptonic Decays
- 4:45 Michael Miller
First Measurement of Inclusive Jet Yields in Polarized p+p Collisions at $\sqrt{s} = 200$ GeV
- 5:00 Nirmalya Parua
D0 Measurement of the Inclusive Jet Cross Section
- 5:15 Marek Zielinski
D0 Measurement of the Dijet Azimuthal Decorrelations
- 5:30 Sergo Jindariani
Two-Particle Momentum Correlations in Jets at Tevatron
- 5:45 Igor Gorelov
Heavy Flavor Production in CDF II Detector

Section III.7: Fragmentation and Transverse Spin II

Room: Sweeney Meeting 2; Chair: Ed Kinney

- 4:30 Oscar Rondon
Nucleon Resonances Spin Structure—RSS: Experiment 01-006 at Jefferson Lab
- 4:45 Akio Ogawa
Collins Function Measurements at Belle
- 5:00 Andrea Bressan
Collins and Sivers Asymmetries on the Deuteron from COMPASS
- 5:15 Flemming Videbaek
Transverse Single-Spin Asymmetries for p^\pm Production from pp Collisions
- 5:30 Kjeld Eysler
Transverse Single Spin Asymmetries at Mid-Rapidity at $\sqrt{s} = 200$ GeV in p+p Collisions

- 5:45 Zinghua Xu
Measurement of Lambda Polarization in Longitudinally Polarized Proton-Proton Collisions at $\sqrt{s} = 200$ GeV at STAR

Section IV.7: General Talks—II

Room: Sweeney Meeting 4; Chair: Curtis Meyer

- 4:30 J. Vijande
Nature of the Scalar Mesons
- 4:45 Anna Krutenkova
Does Inclusive Pion DCX Drop Rapidly Above 0.5 GeV?
- 5:00 Philip Page
New ^8Be Resonances from S-Matrix Poles
- 5:15 Mary Alberg
Parton Distributions in Hadrons
- 5:30 Torleif Ericson
Dispersive Electromagnetic Contributions to the π -N Scattering Amplitude at Threshold
- 5:45 Mijung Kim
Coincidence Exclusive Measurement of the Non-Mesonic Weak Decay of $^{12}_{\Lambda}\text{C}$

Section V.5: SUSY/New Physics

Room: Hilton Mesa B; Chair: Chris Tully

- 4:30 Dimitri Bourilkov
Gauge Coupling Unification, SUSY Scale and Strong Coupling Running
- 4:45 Daniela Kaefer
Searches for the Associated Production of Chargino and Neutralino at D0 and CDF
- 5:00 Xavier Portell
Searches for Squarks and Gluinos
- 5:15 Shaohua Fu
Searches for Production of Scalar Top and Bottom Quarks at the Tevatron
- 5:30 Jedong Lee
Searches for Neutral Particles in Dilepton and Photon Final States
- 5:45 Gianluca Comune
SUSY Search in ATLAS

Section VI.5: CP Violation in B Decays and Constraints on New Physics

Room: Hilton Mesa C; Chair: Owen Long

- 4:30 Hideki Miyake
Time-Dependent CP Asymmetries in $b \rightarrow s$ Penguins
- 4:45 Katherine George
Measurements of the CP-Violating Parameter $\sin 2\beta$ at BaBar
- 5:00 Kazutaka Sumisawa
 ϕ_1 Measurements from $b \rightarrow c$ Decays at Belle
- 5:15 Julie Malcles
Measurements of the Angles α and γ of the CKM Unitarity Triangle with the BaBar Experiment
- 5:30 Akito Kusaka
Constraint on CKM Angle ϕ_2 from B Decays

- 5:45 Maurizio Pierini
Testing Standard Model and New Physics with the Unitarity Triangle Fit

Section VII.3: Neutron Lifetime and Beta Decay

Room: Sweeney Meeting 3; Chair: Pieter Mumm

- 4:30 Alexey Barabanov
Testing T Invariance in the Interaction of Slow Neutrons with Aligned Nuclei
- 4:45 Maurits van der Grinten
Search for the Electric Dipole Moment of the Neutron
- 5:00 Kazimierz Bodek
Search for Time Reversal Violation in Neutron Decay—A Measurement of the Transverse Polarization of Electrons
- 5:15 Mark Makela
Precision Measurement of the Neutron's Beta Asymmetry Using Ultracold Neutrons
- 5:30 Pil-Neyo Seo
Measuring the Neutron Lifetime Using Magnetically Trapped Ultracold Neutrons
- 5:45 Florian Piegsa
A High-Accuracy Measurement of the Spin-Dependent Neutron Scattering Length of the Deuteron

Section VIII.5: Solar, Reactor, and Other Neutrinos

Room: Eldorado Zia B; Chair: Kevin Lesko

- 4:30 Biao Xin
Production of Electron Neutrinos at Nuclear Power Reactors and the Prospects for Neutrino Physics
- 4:45 Alexander Friedland
Probing Fundamental Neutrino Properties with Solar Neutrinos
- 5:00 Takahiro Kubota
Radiative Corrections to Neutrino-Deuteron Scattering Revisited
- 5:15 Stephen Parke
What Fraction of Boron-8 Solar Neutrinos Arrive at the Earth as a ν_2 Mass Eigenstate?
- 5:30 S. Sharma
Model Independent Analysis of 391-Day Salt Phase SNO Data Set
- 5:45 Scott Menary
A Large Liquid Argon TPC for Off-Axis NuMI Neutrino Physics

Section IX.3: Lepton Flavor Violation

Room: Sweeney Meeting 5; Chair: Bill Molzon

- 4:30 Masaharu Aoki
PRISM/PRIME: The Advanced Muon Beam and the Experiment Searching for μ -e Conversion with 10^{-18} Sensitivity
- 4:45 Ryuichiro Kitano
Lepton Flavor Violation in Supersymmetric Models
- 5:00 Andrzej Czarnecki
Muons and Atomic Spectroscopy
- 5:15 Giovanni Signorelli
Status and Prospects for $\mu \rightarrow e \gamma$ with MEG Experiment

Section X.1: Theoretical Topics

Room: Sweeney Meeting 1; Chair: Yuri Shirman

- 4:30 Sean Fleming
Soft Collinear Effective Theory
- 5:00 William Hockings
The T-Violating Effective Chiral Lagrangian
- 5:15 R. Rosenfelder
Vacuum Polarization Effects in the Worldline Variational Approach to Quantum Field Theory
- 5:30 Andrew Beckwith
How the Alteration of a Thin Wall for S-S' Di Quark Pairs Signifies an Einstein Constant Dominated Cosmology and the Breakdown of Semi Classical Approximations for Inflation
- 5:45 Sean Tulin
The Origin of Matter

Section XI.5: Ultra-High-Energy Cosmic Rays

Room: Eldorado Zia A; Chair: Gus Sinnis

- 4:30 Charles Dermer
Ultra-High Energy Cosmic Rays
- 5:00 John Hague
Anisotropy Studies at EeV Energies
- 5:15 Tokonatsu Yamamoto
The First Scientific Results from the Pierre Auger Observatory
- 5:30 Pierre Sokolsky
Results from the HiRes Experiment

Section XII.5: New Detector Systems—Underground Systems

Room: Hilton Ortiz; Chair: Steve Elliott

- 4:30 Eric Zimmerman
The Henderson Mine as an Underground Laboratory
- 4:50 Kevin Lesko
DUSEL-Homestake
- 5:10 Andrew Hime
SNOLAB
- 5:30 Thomas Ward
Integral Neutron Multiplicity Measurements from Cosmic Ray Interactions in Lead
- 5:45 Richard Schirato
Cosmic Ray Muon Tomography for the Detection of High-Z Objects

Poster Session—Tuesday, October 25

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Section 1. Quarks and Gluons in Hot/Dense and Cold Matter

- 39 Alberto Accardi Can we distinguish energy loss from hadron absorption?
- 40 Jorge Casalderrey Solana Conical Flow Induced by Quenched QCD Jets
- 42 S. Kumano Analysis of nuclear parton distribution functions
- 56 Yuji Yamazaki Jets and α_s measurements in ep collisions
- 51 Yusuke Nishida BCS-BEC crossover in relativistic superfluid and its possible realization in QCD
- 41 Michael Issah Azimuthal anisotropy of charged hadrons at RHIC
- 43 Roy Lacey Evidence for a long-range pion emission source in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV
- 52 Jacek Rozynek The Parton Momentum Distribution and the Equation of State in Nuclear Matter.
- 53 Thomas Ullrich Measurement of non-photonic electrons in $\sqrt{s} = 200$ GeV p+p, d+Au, and Au+Au collisions in STAR
- 45 Debsankar Mukhopadhyay Production of Λ and $\bar{\Lambda}$ in Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV
- 55 Qing-hai Wang Secondary pairing in gapless color-superconducting quark matter
- 44 Aram Mekjian Properties of the baryonic chemical potential and specific heat of hadronic matter from RHIC/CERN experiments
- 54 Ramona Vogt Proposal for a High Energy Nuclear Database

Section 2. QCD (Confinement, Chiral Symmetry, on the Lattice, Gluon Saturation)

- 101 Angelo Raffaele Fazio Gauge Invariance of the Vacuum Condensate of Dimension Two in Yang-Mills Theory
- 102 Michael Lublinsky From Dense Dilute Duality to Selfduality of High Energy QCD
- 103 Hanna Mahlke Measurement of the Charged D Meson Pseudoscalar Decay Constant

Section 3. Nucleon Structure

- 71 Andrzej Sandacz Diffractive vector meson production at COMPASS and plans for GPD's measurements
- 57 Helmut Jahn Pion-Field Theoretical Description of the $\Delta^{++}(1236)$ Resonance without QCD
- 60 Olga Piskunova Baryon charge transfer and production asymmetry of $\Lambda_c / \bar{\Lambda}_c$ in hadron interactions
- 46 Kapil Chandra Relativity and Wave Mechanism
- 48 Julian Felix Λ^0 Polarization in pp \rightarrow p Λ^0 K $^+(\pi^+\pi^-)^N$, N = 1,2,3,4,5, at 27.5 GeV
- 84 Jason Webb Inclusive π^0 Production in Polarized pp Collisions Using the STAR Endcap and Barrel Electromagnetic Calorimeters
- 47 Renee Fatemi Polarization Observables in Deuteron Electro-Disintegration

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70	Anuj Purwar	Transverse single spin asymmetries from muons at forward rapidity in polarized p+p collisions at $\sqrt{s_{NN}} = 200$ GeV
72	Joseph Seele	Longitudinal Double Spin Asymmetry for η production at mid-rapidity in polarized p+p collisions at $\sqrt{s_{NN}} = 200$ GeV
59	Frank Merritt	Predicting Minimum Bias and Underlying Event at LHC

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18	Vladimir Kopeliovich	Pentaquarks as Chiral Solitons and as Multiquark States
19	Vladimir Kopeliovich	Flavored Multibaryons and Hypernuclei in Topological Soliton Model
4	Pedro Costa	Analysis of $U_A(1)$ symmetry breaking and restoration effects on the pseudoscalar meson observables
8	Torleif Ericson	Hadronic Range Effects in πN Scattering at Threshold
9	Torleif Ericson	Isospin Breaking in πN Scattering at Threshold
29	Sourav Sarkar	Dynamically generated spin $3/2^-$ resonances from octet meson-decuplet baryon interactions
12	Avraham Gal	Pentaquark traces in kaon-nuclear phenomenology
34	Laura Tolos	The effect of the in-medium Θ^+ pentaquark on the kaon optical potential
17	Vladimir Komarov	Multibaryon excitation—evidence for the QCD degree of freedom in nuclear reactions?
33	Sachiko Takeuchi	$\Lambda(1405)$ as a $q^4\bar{q}$ state
15	Tai Horikawa	Nucleon electromagnetic form factors in nuclear matter
16	Tetsuo Hyodo	Phenomenology of spin $3/2$ baryons with pentaquarks
28	Mohammad Saeed	Radii of Hadrons/Lighter Nuclei and the Geometrical Picture
32	Takatoshi Suzuki	An Experimental Search for Deeply Bound Kaonic Nuclear States
5	Swapn Das	Energy Dependence on ρ^0 Mass Distribution
10	T. Fernandez Carames	Strange Tribaryons
7	David Entem	$\text{NN}\bar{\text{N}}$ bound states in a constituent quark model
13	Yuri Gurov	Spectroscopy of the superheavy hydrogen isotopes $^4\text{-}^7\text{H}$
35	Yiharn Tzeng	Hypernuclei and Recent Hyperon-Nucleon Potentials
30	Tatiana Skorodko	Exclusive Measurements of $\text{pp}\rightarrow\text{NN}\pi\pi$ from Threshold up to the $\Delta\Delta$ region—Dynamic σ and $\pi\pi$ Low-Mass Enhancement
3	Petros Aslanyan	Exotic narrow resonance searches in the system ΛK_s^0 in p+p propane collisions at 10 GeV/c
14	Satoru Hirenzaki	Structure and Formation of Mesic Atoms and Mesic Nuclei
11	Hiroyuki Fujioka	Observation of a K^-pp bound state and future prospects at the FINUDA

36	Junko Yamagata	In-Flight (K^- ,p) Reactions for the Formation of Kaonic Atoms and Kaonic Nuclei
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24	J. Mares	\bar{K} -nuclear deeply bound states in a dynamical model
21	Yuu Maezawa	Strange Dibaryons and Tribaryons as Hexa- and Nona-Quark States
1	Luis Alvarez Ruso	Low Energy Pions in Nuclear Matter and Double-Pion Photoproduction in Nuclei
6	M. Döring	S-wave pion nucleon scattering lengths from πN , pionic hydrogen and deuteron data
22	Hanna Mahlke	Radiative Decays of the $Y(1S)$ to a Photon and Two Charged Tracks
23	Hanna Mahlke	Study of Two-Body Radiative $Y(1S)$ Decays
2	Alfonso Anzaldo-Meneses	Application of the mathematical theory of partitions on the description of nuclear and solid state problems
26	Timothy Burns	Building Blocks of QCD Exotics

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63	Conrado Albertus	Leptonic and semileptonic bottom hadron decays
80	Sachiko Takeuchi	$X(3872)$: a $q\bar{q}-c\bar{c}$ molecule with attractive diquarks
64	BaBar Collaboration	Recent results on hadronic B decays at BaBar
69	Victor Henner	Wavelet analysis of data in physics of resonances: application to the R measurement
81	Yuji Yamazaki	Heavy flavor production in ep collisions
75	Evgeni Kolomeitsev	Charmed Molecules
66	Stefano Giagu	Measurement of B^0 Oscillations
67	Stefano Giagu	B Hadron Lifetime Measurements
68	Stefano Giagu	Selected Topics in B and Charm Physics at CDF
78	Alexey Petrov	Spectator effects and lifetimes of heavy hadrons
76	Hanna Mahlke	Measurement of the Cross Section for $e^+e^- \rightarrow$ hadrons at $E_{cm} = 3773\text{MeV}$
77	Hanna Mahlke	Dalitz-plot Analyses from CLEO
79	Yudi Santoso	SUSY searches and SUSY phases

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91	Ashish Chaturvedi	Restoration of Supersymmetry against arbitrary small quantum corrections using feedforward neural network
105	Franklin Potter	Leptons and Quarks in discrete subgroups of the Standard Model gauge group
90	Carl Brannen	Liquefaction
95	K. Jungmann	Atomic Trapping of Radioactive Isotopes to Study Time Reversal Violation

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112	Yuji Yamazaki	Deep inelastic cross sections at HERA with polarized lepton beam
111	Thomas Ward	Simplified Extension of Electroweak Mixing and the Generation of Massive Gauge Bosons
94	Michael Gericke	The QWeak Experiment
107	Mayda Velasco	Measurement of the ratio R_K between the Branching Ratio of $K \rightarrow e \nu$ and $K \rightarrow \mu \nu$ decays
108	Mayda Velasco	Precise measurement of form factors for $K_L \rightarrow \pi e \nu$ and $K_L \rightarrow \pi \mu \nu$ decays
109	Mayda Velasco	First observation for $K_s \rightarrow \pi^0 e e$ and $K_s \rightarrow \pi^0 \mu \mu$
110	Chung-Hsiang Wang	Direct CP Asymmetry in Charmless Hadronic Two-body B Decays
96	Hanna Mahlke	Limits on Weak Annihilation in Inclusive Charmless Semileptonic B Decays
97	Hanna Mahlke	Exclusive semileptonic decays of D mesons produced in the reaction $\psi(3770) \rightarrow D \bar{D}$
98	Hanna Mahlke	Inclusive Semileptonic Branching Fractions and Electron Momentum Spectra
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117	Victor Flambaum	Parity and time reversal violation in atoms and test of the Standard Model
127	Oscar Naviliat-Cuncic	Toward a New Measurement of the Neutron Electric Dipole Moment
130	Daniel Rodríguez	Search for tensor couplings in the weak interaction using ${}^6\text{He}^+$ ions and a novel transparent Paul trap
118	Peter Geltenbort	Ultracold Neutron Storage in a Magnetic Trap made of Permanent Magnets
121	Dennis Murphree	Nuclear Spin-Dependent Parity Nonconservation in Molecules
120	Cheng-Pang Liu	Schiff Theorem and the Electric Dipole Moments of Hydrogen-Like Atoms
119	Philip Harris	The CryoEDM Experiment
128	Ruediger Picker	A superconducting magnetic UCN trap for precise neutron lifetime measurements

Section 11. Nuclear and Particle Astrophysics and Cosmology

114	Manjari Bagchi	QCD as an interface between particle-physics and astrophysics
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116	Sharmila Kamat	Characterization of the Neutron Response to a Liquid Xenon Based Detector for Dark Matter Studies
125	Evgeni Kolomeitsev	Lattice QCD Constraints on Hybrid and Quark Stars
113	Sotiris Athanassopoulos	Nuclear Mass Systematics with Neural Nets and Astrophysical Nucleosynthesis
134	Toshitaka Tatsumi	Magnetic phase diagram of QCD and compact stars
115	Prashanth Jaikumar	Neutrino and Photon radiation from the surface of Quark Stars
135	Brian Connolly	Measurement of the High Resolution Fly's Eye Composition

Section 12. Facilities and Instrumentation

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| 124 | Heejong Kim | A Study on the Afterpulse of Photomultiplier Tubes |
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| 123 | Kensuke Homma | A novel idea for nondestructive measurement of single charged particle |
| 122 | Christina Haegeman | Development and Testing of Novel Strip-Pixel Detectors for the Silicon Vertex Tracker at PHENIX. |

Section 13. Student Poster Session

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| 37 | Farruh Akramov | About Limit Masses of Elementary Particles in Quantum Field Theory with Fundamental Mass |
| 61 | Hovhannes Grigoryan | Vector Meson Mass Corrections at $O(a^2)$ in PQChPT with Wilson and Ginsparg-Wilson quarks |
| 74 | Edmund Meyer | Candidate Molecular Ions for an Electron EDM Experiment |
| 73 | Karsten Koeneke | $B \rightarrow \rho(\omega) \gamma$, $B \rightarrow K^* \gamma$ and the Unitarity Triangle |
| 87 | Anar Rustamov | Exclusive η meson reconstruction in pp collisions with the HADES spectrometer |
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| 62 | David Howell | Spin Dressing Effects on Polarized ^3He |
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| 49 | Brian Beckford | Detection of Cherenkov Light with Wavelength Shifting Acrylic Plastic |
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General Information

Sessions and Rooms

The conference sessions will be held at three separate locations; the Santa Fe Hilton, the Eldorado Hotel, and the Sweeney Convention Center. All plenary sessions will be held at Sweeney. Parallel sessions will be divided between the Hilton, the Eldorado, and Sweeney. Floor plans of the three facilities are reproduced in this program.

Hotels

The Hilton of Santa Fe, 100 Sandoval, 988-2811

The Eldorado Hotel, 309 W. San Francisco Street, 988-4455

Hotel Santa Fe, 1501 Paseo de Peralta, 982-1200

Hotel Plaza Real, 125 Washington Avenue, 988-4900

Registration and Conference Secretariat

The Conference Registration desk is located in the Promenade in the Hilton Hotel on Sunday, October 23, 4:00 PM–9:00 PM. After Sunday, the desk will move to the Sweeney Convention Center Lobby and will be staffed daily from 7:30 PM–4:30 PM. Representatives of the Conference Secretariat will be present at all three conference locations: the Santa Fe Hilton, the Eldorado Hotel, and the Sweeney Convention Center. Conference representatives are identifiable by their blue shirts with the initials “CCC”.

Conference Welcome Reception

The Conference Welcome Reception will be held in the Mesa Ballroom of the Hilton Hotel on Sunday, October 23, from 7:00 PM–9:00 PM.

Public Science Lecture

A public science lecture will be held at the Lensic Theater on Tuesday evening, October 25, 8:00 PM–10:00 PM. The lecture, “The Accelerating Universe,” will be given by Wendy Freedman of the Carnegie Observatories, Pasadena, CA.

Reception and Conference Banquet

The Conference reception will be held the evening of Thursday, October 27, 2005, 6:30 PM–7:30 PM in the Anasazi Ballroom of the Eldorado Hotel. The Banquet follows, 7:30 PM–10:30 PM in the Pavilion Ballroom of the Eldorado Hotel. The banquet guest speaker is Dr. Eric Blinman, Deputy Director of the Office of Archaeological Studies, a research enterprise within the Museum of New Mexico, Department of Cultural Affairs. The title of his talk is “Florescence and Crash: Highlights of Environmental and Cultural History in the Southwest.”

Terminal Room and Internet Connections

Terminals and internet connections are located in the Aspen Room of the Hilton Hotel. The Aspen Room will be open Sunday, 5:00 PM–11:00 PM and Monday through Friday, 7:30 AM–10:00 PM.

Message Board

A message board is located in the lobby of the Sweeney Convention Center.

Lunch

Lunches are not provided by the conference organizers. We invite you to explore the many local restaurants within walking distance of the conference sites.

Instructions for Speakers

Each plenary or parallel speaker should submit his/her talk on a USB memory stick or other media to personnel in the DeVargas Room of the Eldorado Hotel, confirm time slot, and pick up general instructions for the oral sessions. Speakers should have talks uploaded no later than 6:00 PM on the day before the scheduled talk. The DeVargas Room will be open from 4:00 PM–10:00 PM on Sunday, and from 8:00 AM–6:00 PM Monday through Friday. The website (http://panic05.lanl.gov/av/panic_speakers_instructions.html) has more detailed instructions.

Poster Session and Reception

The Poster Session Tuesday, October 25, 4:00–6:30 PM in the Anasazi Ballroom of the Eldorado Hotel, will include a wine and cheese reception (cash bar). Presenters should mount their posters between 1:00–3:00 PM that day, stand by them from 4:00–6:30 PM, and remove them immediately after the session. Mounting pins will be provided. Maximum poster size: 3.8 ft wide by 4.0 ft high. Posters that exceed these limits cannot be displayed. The poster location map is in the registration packet.

If you need to print your poster locally (at your own expense), a FedEx Kinko's is located at 301 N. Guadalupe Street, telephone 982-6311 (approximately three blocks west of the Sweeney Convention Center).

Social Programs—Wednesday Excursions

Wednesday afternoon, October 26, is reserved for conference excursions and personal time. Four excursion options are available (listed below). Each tour will last approximately five hours. The fee of \$50 per person includes transportation, expert local guides, entry fees, gourmet lunch, iced water on board coach, and tax and gratuity. Recommended attire: comfortable walking shoes, layered casual outdoor wear, sunscreen, and a hat or cap. Visit the PANIC '05 website for details or contact the Conference Registration Desk for reservations and availability before 4:30 PM on Monday. The buses will load at the Hilton Hotel between 12:15 PM and 12:35 PM. Departure is promptly at 12:45 PM.

1. Santuario de Chimayo with lunch at Rancho de Chimayo.
2. Bandelier National Monument with picnic lunch.
3. Walking tour of Los Alamos, museum, and lunch at Gabriels.
4. Guided hike of Tent Rocks Monument and picnic lunch.

Student Program

The PANIC '05 student program is intended to provide an enhanced conference experience for undergraduate and graduate students. Events include participation in the poster session for the presentation of student research, introductions to hot topics discussed at the meeting, and an evening Career Day Recruiting Session.

Monday, October 24

The student events below are in the Hilton Ortiz Ballroom unless otherwise stated.

Hot Topic I—Tom Hemmick (SUNY-Stonybrook), “RHIC Physics: Adventures at the Highest Temperatures Achieved in the Laboratory,” 12:30–1:30 PM, student lunch provided.

Student Reception—7:00–8:00 PM

Tuesday, October 25

Hot Topic II—Rex Tayloe (Indiana University), “Neutrinos, Oscillations, and New Physics: An Introduction,” 12:30–1:30 PM, student lunch provided.

Wednesday, October 26

Career Day Recruiting Session—7:00–9:00 PM

Thursday, October 27

Hot Topic III—Dan Holz (Los Alamos), “Accelerated Cosmology,” 12:30–1:30 PM, student lunch provided.

Friday, October 28

Student Farewell, 4:30–5:30 PM, Sweeney Convention Center

Satellite Sessions

Three satellite sessions are planned. Refer to the PANIC '05 website or contact the session organizers for details.

A. Heavy Ion Physics at the LHC

Sunday, October 23, 9:00 AM–6:00 PM, Hilton Ortiz Ballroom. Fee is \$70.

Organizers: T. Awes, R. Betts, B. Cole (co-chair), G. Odyniec, H. Takai, I. Vitev, B. Wyslouch (co-chair)

B. RHIC Satellite Meeting, Physics Opportunities and Accelerator Challenges

Saturday and Sunday, October 29–30, 9:00 AM–5:00 PM, Hilton Mesa Ballroom. Fee is \$75.

Organizers: S. Aronson (chair), A. Deshpande (co-chair), D. Kharzeev, D. Lowenstein, T. Ludlam, S. Mioduszewski, T. Roser, P. Steinberg, T. Ullrich, R. Venugopalan, W. Vogelsang

C. Neutrino Satellite Meeting: Future of Neutrino Physics

Saturday, 9:00 AM–5:45 PM, and Sunday, 9:00 AM–5:00 PM, October 29–30, Hilton Mesa Ballroom.
Fee is \$75.

Organizers: Y. Efremenko (co-chair), S. Elliott, K. Heeger, A. Hime, K. Lesko (co-chair),
W. Louis (chair), H. Murayama, G. Mills, A. Poon, R. Van de Water

Companion Program

Monday, October 24, 2005

8:30 AM–10:00 AM **Welcome, Complimentary Coffee Hour**, Hilton Hotel Pinon Grill

10:00 AM–12:00 noon **Walking Tour of Downtown Santa Fe**

Museum-trained docents will lead groups of 15–18 on a walking tour of historic Santa Fe, the seat of government for almost 400 years and the site of hunter-gatherer habitation for thousands of years. The tour costs \$10.00 per person (under 17 free) and lasts about an hour and 45 minutes.

Please indicate your interest in the walking tour on the *Conference Registration Form* so that enough docents will be available. Docents will be on hand during the Coffee Hour to take your \$10.00 payment in cash or by check (to the *Museum of New Mexico Foundation*) and will lead the tour groups at 10:00 AM from the Hilton Hotel Pinon Grill.

2:30 PM–5:30 PM **Cooking Class and Tasting, Santa Fe School of Cooking**

This acclaimed recreational cooking school offers a three-hour class on *Southwest Tapas*, tasty regional hors d'oeuvres. The class, accommodating a maximum of 44 participants, costs \$65.00 plus tax per person. Please reserve your place in the cooking class by:

- telephone at 505-983-4511 (preferred), or
- e-mail to: e-mail@santafeschoolofcooking.com
- give name, mention PANIC, and give your hotel phone number

Registered, prepaid cooking class participants should go on foot in time for the 2:30 class to the: Santa Fe School of Cooking, 116 W. San Francisco Street
(two blocks from Hilton Hotel, upstairs in the Plaza Mercado)

Tuesday, October 25, 2005

All-Day Taos Outing

The tour begins with a 1.5-hour drive through colorful northern New Mexico following the scenic Rio Grande River canyon to Taos. First stop—the historic 3-story Taos Pueblo, site of the background painting on the PANIC '05 poster. Second stop—Taos Plaza. You will have the choice of a guided walking tour of the town or free time to wander through the galleries and shops. Enjoy lunch at any of the restaurants on or near the plaza. Then, the tour will drive to the Rio Grande Gorge bridge to view grand vistas.

The Millicent Rogers Museum in Taos, New Mexico, offers outstanding historical collections of Native American jewelry, ceramics, paintings, and weavings; Hispanic textiles, metalwork, sculpture; and a wide range of contemporary Southwestern art. The permanent collection includes the Maria and Julian Martinez family pottery collection.

Depart from the Hilton Hotel at 8:00 AM and return between 5 and 6 PM. Transportation and guide costs \$35 per person. Modest entrance and photography fees at Taos Pueblo, lunch, and museum fees are extra. Places can be reserved at the CCC website (<http://www.peopleware.net/2625d/>) or at the Conference Registration Desk no later than 4:30 PM on Monday.

Cash payment only for bus and most other activities.

Wednesday, October 26, 2005

12:30 PM Conference Excursions

Companions are welcome to join the Wednesday afternoon excursions planned for all conference participants. Please indicate your interest in these excursions on the Conference Registration Site.

Thursday, October 27, 2005 —or anytime. Please note that museums are closed on Mondays.

Museum Visits

There are several and quite varied museums on or within walking distance of the Plaza in Santa Fe. In addition, we invite you to consider these other museum possibilities a short bus or taxi ride away, all grouped together in one location as part of the *Museum Hill* complex.

- Museum of Indian Arts & Culture, admission \$7.00
the art, artifacts and archeology of the Southwest from ancestral to contemporary times
- Museum of International Folk Art, admission \$7.00 (or \$15.00 pass for four days unlimited visits to four museums, including the two museums above plus the downtown Palace of the Governors and Museum of Fine Arts) *a collection of the world's folk arts, including toys, textiles, household goods and religious art*
- Museum of Spanish Colonial Art, admission \$6.00
exhibits the Spanish Colonial arts tradition throughout the world, including New Mexico, once the northernmost point of the Spanish empire
- Wheelwright Museum of the American Indian, admission free
contemporary and historic art and artifacts, including the world's largest sand painting collection
- Museum Hill Café, lunch entrees from \$7.00–\$8.50
mountain views and a varied menu

Transportation to Museum Hill on Camino Lejo

- **City bus** “M” stop, Sheridan Avenue (two blocks from Hilton Hotel, one-half block from Sweeney Center) departing every forty-five minutes, fare \$0.50 per person each way
- **Capitol City Cab**, 438-0000, fare approximately \$11.00 each way

Emergency and Pharmacy

Dial 911 for all emergencies. A 24-hour Walgreens Pharmacy is located at 106 S. St. Francis Drive, telephone 982-9811.

Insurance

Participants are strongly advised to make their own insurance arrangements. The organizers cannot accept any liability for injuries sustained, or for loss or damage to property belonging to participants or accompanying persons, either during or as a result of the conference.

Committees

Scientific Program Committee

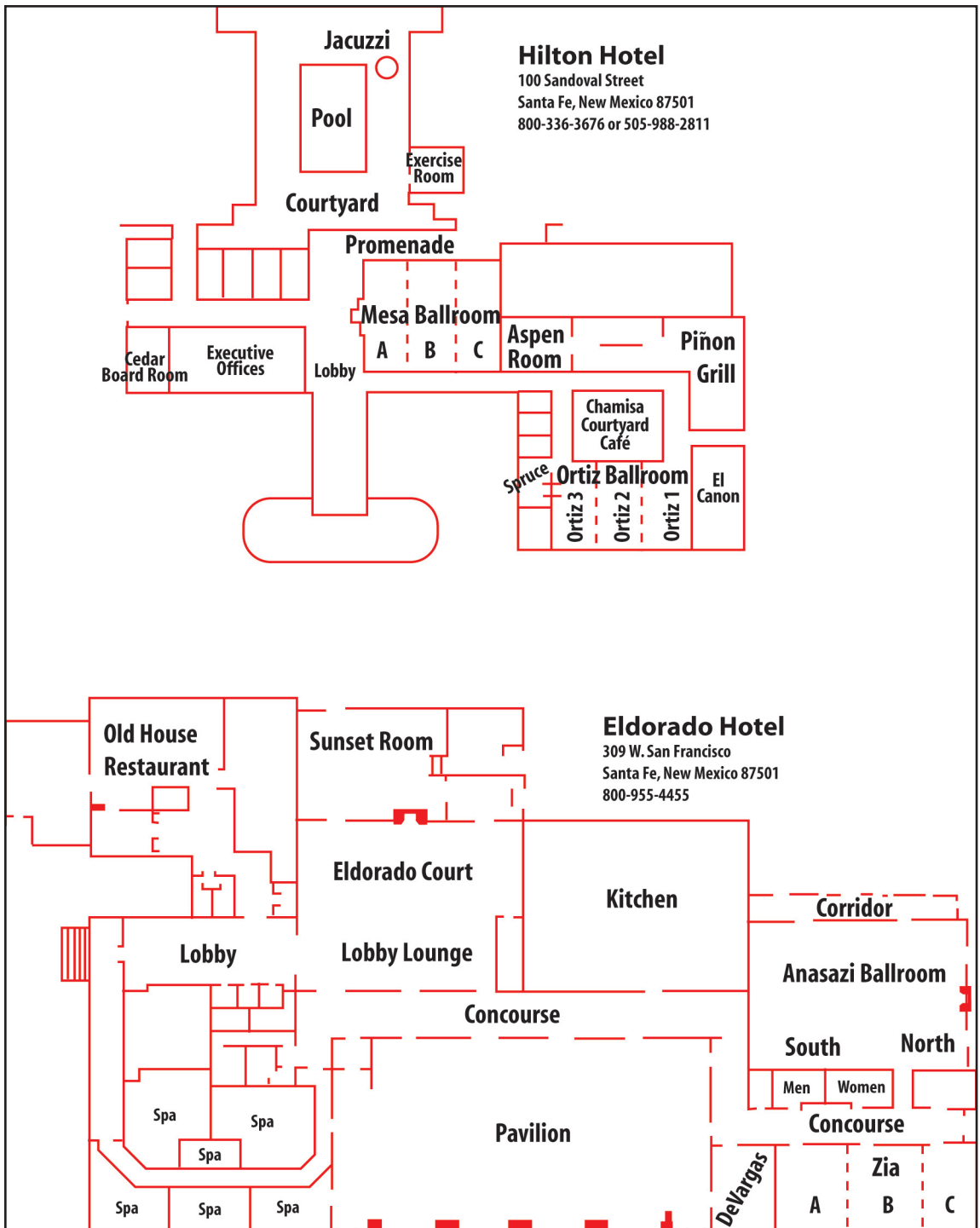
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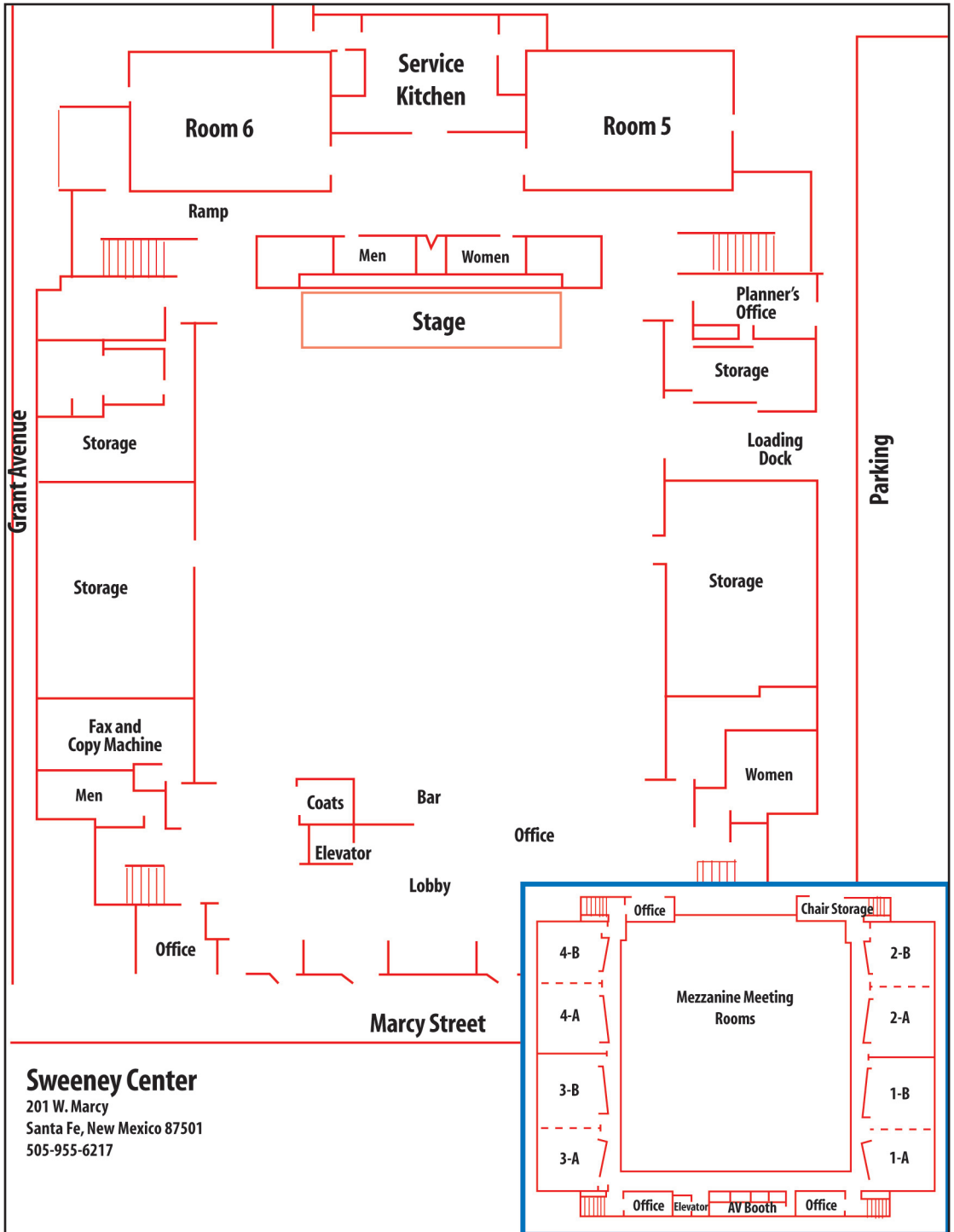
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Sweeney Center
 201 W. Marcy
 Santa Fe, New Mexico 87501
 505-955-6217

The original acrylic painting featured on this cover was done by Natalie Cooper (age 12) in 1988. Natalie is currently a graphic designer in Santa Fe.

