SLAC High-Energy Theory Group

M. E. Peskin
2006 Program Review

To begin, discuss the personnel of the Theory Group and its recent evolution:

95% of our budget is for staff salaries.

our primary discretionary expense is the salaries of postdoctoral fellows

Faculty and Staff

Stan Brodsky
Lance Dixon
JoAnne Hewett
Shamit Kachru (1/2)
Michael Peskin
Helen Quinn
Tom Rizzo
Eva Silverstein (1/2)
Marvin Weinstein

emeritus

James Bjorken
Richard Blankenbecler
Sid Drell
Pierre Noyes
Jogesh Pati
Yung-Su Tsai

We expect that, in the fall, Jay Wacker will join the group as an Assistant Professor.

Postdoctoral Fellows

Carola Berger
Bogdan Florea
Roni Harnik
Ryuichiro Kitano
Alex Maloney
Peter Svrcek

next year:

Darren Forde
Masahiro Ibe
Mithat Unsal

last 7 years:
28 offers, 22 accepted

Long-Term Visitors

Changrim Ahn
Maria Hererro
Samuel Moukouri
Washington Taylor
James Vary

Graduate Students

Michael Binger	Brodsky
Wu-Yen Chuang	Kachru/Peskin
John Conley	Hewett
Michael Davenport	Peskin
James Gainer	Hewett
Alex Giryavets	Kachru
Daniel Green	Silverstein
My Phuong Le	Hewett
Alex Saltman	Silverstein
Stewart Siu	Weinstein/Peskin
Georgios Sofianatos	Dixon
David Starr	Silverstein
Tommer Wizansky	Peskin

plus 1st -year rotators

Kachru-Silverstein students are supported jointly w. campus

Our group also hosts the high-energy theory groups from the Stanford Physics Department and from U C Santa Cruz 2 days/week. There is easy and continuing collaboration among our three groups.

Stanford faculty:

Dimopoulos, Kallosh, Linde, Shenker, Susskind

UCSC faculty:

Banks, Dine, Haber

Theorists from KIPAC attend our seminars and vice versa. Ted Baltz and Andrei Frolov interact closely with our group.

The majority of our recent postdoctoral fellows have gone on to faculty positions at major institutions:

1994:
Scott Thomas > Rutgers
1995:
Damien Pierce
James Wells > Michigan
Mihir Worah
1996:
Yuval Grossman > Technion
1997:
Nima Arkani-Hamed > Harvard
1998:
John Brodie
Hooman Davoudiasl > BNL
Martin Schmaltz > Boston
1999:
Gudrun Hiller > Munich
Albion Lawrence > Brandeis
Kirill Melnikov > Hawaii

2000:
Simeon Hellerman > (IAS)
2001:
Babis Anastasiou > Fermilab
Thomas Becher > Fermilab
David E. Kaplan > Johns Hopkins
2002:
Stephon Alexander > Penn State
Richard Hill > (postdoc)
Amir Kashani-Poor > (postdoc)
Aaron Pierce > Michigan
2003:
Adam Lewandowski > Annapolis
Alex Maloney > McGill
2004:
Emmanuel Katz > Boston

It has always been true that much of the most interesting work in the SLAC Theory Group has been driven by the interested of our cadre of postdocs.

This is still true today, and I hope it will be made clear in the discussions this afternoon.

How are we theorists connected to the experimental program ?

We have a continuing day-to-day connection to experimenters on site.

Our theoretical investigations help to define the lab's future experimental projects.

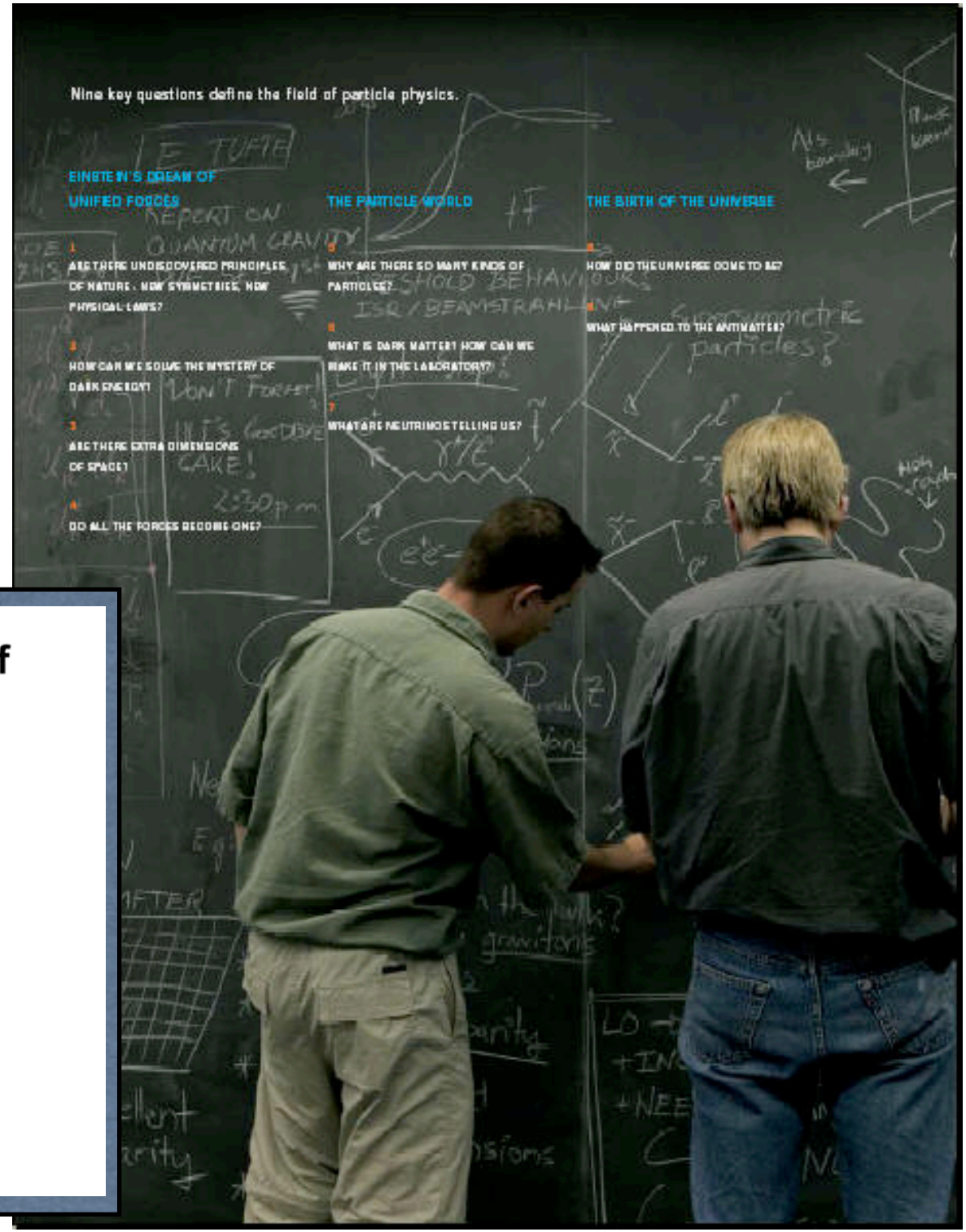
Our investigations have call attention to important observables for current and future experiments and clarified their relation to theory.

We organize formal programs that bring together SLAC experimenters and theorists from the broader community.

The last of these is easiest to illustrate ...

JoAnne Hewett was an author of the report "Discovering the Quantum Universe" and is a member of P5

Helen Quinn was a member of the EPP2010 committee



Revealing the Hidden Nature of Space and Time

Charting the Course for Elementary Particle Physics

Committee on Elementary Particle Physics in the 21st Century

Board on Physics and Astronomy

Division on Engineering and Physical Sciences

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

Lance Dixon and Michael Peskin, with Uli Baur, Sally Dawson, and Doreen Wackeroth, are organizing the Loopfest series of workshops on precision QFT calculation for future colliders.

Preliminary Program

Kavli Auditorium, Kavli Building (Building 51)

- Monday, June 19
- Tuesday, June 20
- Wednesday, June 21

Monday, June 19, 2006

	Speaker	Topic	(MIN)
	MORNING	OVERVIEW, ILC, LHC	
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

Bob Cahn, Matt Strassler, and Michael Peskin are organizing a

"West Coast LHC Theory Network"

to help us pool skills and knowledge needed to understand the LHC data. Our mailing list has 85 subscribers from 22 institutions. We have had 2 one-day meetings, with more to come.

West Coast LHC Theory Network -- UCSD meeting

Friday, May 5, 2006, at the University of California, San Diego

- 9:15 - 9:30 : Welcome: - Ben Grinstein (UCSD)
- 9:30 - 10:15 : Introduction to CMS and Higgs at LHC - Jim Branson (UCSD)
- 10:15 - 11:00 : CMS Trigger Strategy - Sridhara Dasu (U of Wisconsin)

- 10:45 - 11:00 : coffee

- 11:15 - 12:00 : The First 0.1-1.0 fb-1 at LHC - Ian Hinchliffe (LBNL)
- 12:00 - 12:45 : New Physics Searches at CMS - Claudio Campagnari (UCSB)

- 12:45 - 1:45 : lunch; discussion with CMS group

- 1:45 - 2:30 : Beyond the Standard Model at LHC -- Ann Nelson (U of Washington)
- 2:30 - 2:45 : Discussion

We are collaborating with the new SLAC ATLAS group. We hope that the SLAC Theory Group will be a resource for ATLAS collaborators, on the West Coast and elsewhere.

We have now covered all aspects of the SLAC Theory Group, except for our actual physics research.

That will be described in the afternoon.