## Brookhaven Forum 2007: New Horizons at Colliders May 30-June 1, 2007

Brookhaven National Laboratory, Upton, NY

(All Talks in Building 510A)

MAY 30, 2007						
PLENARY PROGRAM, Large Seminar Room, Chair: W. Marciano						
8:45—9:00 a.m.	Director's Welcome/Introduction to the Forum	Sam Aronson/ Organizers				
9:00—9:50 a.m.	Challenges for the Discovery of New Physics at the LHC	M. Peskin				
9:50—10:40 a.m.	Higgs Physics at the LHC	D. Zeppenfeld				
10:40—11:10 a.m.	Coffee Break, Large Seminar Lounge					
11:10—12:00 p.m.	The Physics Program of the ILC	J. Hewett				
12:00—2:00 p.m.	Lunch					

2:003:20 p.m.	PARALLEL SESSION I: (Talks are 15' + 5' minutes)			
The Higgs	Warped Models	Colliders and Cosmology		
Location: Small Seminar Room	Location: 2-84	Location: 2-160		
Chair: H. Logan	Chair: T. Rizzo	Chair: Tim Tait		
A. Kharchilava: Selected Results	E. Ponton: Light KK States in	S. Westerhoff: The Highest Energy Cosmic Rays		
on Electroweak, Top and Higgs	Randall-Sundrum Scenarios			
Searches From Tevatron				
L. Reina: Probing Higgs Yukawa	A. Atre: Collider Signatures	H. Baer: Models of SUSY Dark		
Couplings at Hadron Colliders	of Warped Extra Dimensions	Matter		
T. Figy: NLO QCD Corrections for	S. Gopalakrishna: <i>LHC</i>	P. Fox: LHC and Dark Matter		
Higgs Production via VBF in	Signatures of Warped Space	Signals of Improved Naturalness		
Association of Three Jets at the	Models			
LHC				
A. Martin: <i>Higgs Cascade Decays</i>	M. Schwartz: The Peculiar	E. Lunghi: <i>Dark Matter, Flavor and</i>		
to 2-gamma and 2-jet at the LHC	Prophetic Power of AdS/QCD   Collider Signatures of GUT			
to 2-gamma and 2-jet at the Line		MSSM		
3:203:50 p.m.	Coffee Break	Large Seminar Lounge		
3:505:10 p.m.	PARALLEL SESSION II:			
Tops and Compositeness	ILC Physics	Supersymmetric Models		
Location: Small Seminar Room	Location: 2-84	Location: 2-160		
Location: Small Seminar Room Chair: D. Rainwater	Location: 2-84 Chair: E. Ponton	Location: 2-160 Chair: H. Baer		
Chair: D. Rainwater	Chair: E. Ponton	Chair: H. Baer		
Chair: D. Rainwater T. Tait: <i>Top-flavor Baryogenesis</i>	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry		
Chair: D. Rainwater T. Tait: <i>Top-flavor Baryogenesis</i> B. Lillie: <i>Searching for New</i>	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements C. Berger: The ILC and the	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry D. Morrissey: Higgs-Exempt No-		
Chair: D. Rainwater T. Tait: Top-flavor Baryogenesis  B. Lillie: Searching for New Physics With High p_T Top	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry		
Chair: D. Rainwater T. Tait: Top-flavor Baryogenesis  B. Lillie: Searching for New Physics With High p_T Top Quarks	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements C. Berger: The ILC and the LHC Inverse Problem	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry D. Morrissey: Higgs-Exempt No- Scale Supersymmetry		
Chair: D. Rainwater T. Tait: Top-flavor Baryogenesis  B. Lillie: Searching for New Physics With High p_T Top	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements C. Berger: The ILC and the LHC Inverse Problem T. Rizzo: Solving the LHC	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry D. Morrissey: Higgs-Exempt No-		
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Chair: D. Rainwater T. Tait: Top-flavor Baryogenesis  B. Lillie: Searching for New Physics With High p_T Top Quarks K. Agashe: Signals of Composite Higgs in Top and W/Z Physics	Chair: E. Ponton H. Logan: Theory Uncertainties in ILC Higgs Measurements C. Berger: The ILC and the LHC Inverse Problem  T. Rizzo: Solving the LHC Inverse Problem for SUSY at the ILC	Chair: H. Baer R. Kitano: Sweet Spot Supersymmetry D. Morrissey: Higgs-Exempt No- Scale Supersymmetry D. Shih: R-Symmetry Breaking in Oraifeartaigh Models		
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MAY 31, 2007						
PLENARY PROGRAM, Large Seminar Room, Chair: A. De Roeck						
9:00—9:50 a.m.	Naturalness and Electroweak Symmetry Breaking	Y. Nomura				
9:50—10:40 a.m.	Supersymmetry and Its Breaking	N. Seiberg				
10:40—11:10 a.m.	Coffee Break, Large Seminar Lounge					
11:10—12:00 p.m.	New Horizons in the Universe	L. Krauss				
12:00—2:00 p.m.	Lunch					

2:003:20 p.m.	PARALLEL SESSION I:		
Tops and QCD	Supersymmetric	Alternative New Physics	
Location: Small Seminar Room	Phenomenology	Location: 2-160	
Chair: B. Lillie	Location: 2-84	Chair: E. Lunghi	
	Chair: R. Kitano		
M. Papucci: Top Flavor Violation:	K. Kiers: CP Violation in	S. Bar-Shalom: <i>Probing Heavy</i>	
From the B-factories to the LHC	Supersymmetric Particle Decays	Majorana Neutrinos at High	
		Energy Colliders	
W. Vogelsang: Forward-Backward	B. Nelson: Exotic SU(2)-Singlet	M. Chen: Discrete Family	
Asymmetry in Top Production	Squarks and Quarks at the LHC	Symmetries for Quarks and	
		Leptons	
C. Berger: Bootstrapping One-	G. Shaughnessy: Gluino Mass	G. Kribs: The Return of the	
Loop QCD Amplitudes	Measurement at the LHC	Fourth Generation	
S. Fleming: Top Quark Mass From		D. Rainwater: Same-sign	
Top Jets		electroweak charged particle	
		production at LHC	
3:203:50 p.m.	Coffee Break	Large Seminar Lounge	
3:505:10 p.m.	PARALLEL SESSION II:		
Experiments and Analysis	Higgsless Physics	Cosmology and Astroparticle	
Location: Small Seminar Room	Location: 2-84	Physics	
Chair: L. Reina	Chair: K. Agashe	Location: 2-160	
		Chair: B. Nelson	
B. Knuteson: Global Analysis of	M. Kurachi: <i>Three Site Higgsless</i>	L. Everett: Supersymmetry,	
Tevatron Run II Data	Model	Dark Matter, and Dark Energy	
M. Narain: Bread and Butter	C. Jackson: One-loop	G. Vasileiadis: Results and	
Physics at the Collider and Its	Corrections to the S and T	Perspective for the HESS	
Implications for Future Discoveries	Parameters in Higgsless Models	Experiment	
P. Schuster: On-Shell Effective	M. Piai: AdS-TC toward LHC	R. Easther: Constraining	
Theories for Searches and Signal		Inflation	
Interpretation at the LHC			
I. Yavin: Spin determination in		D. Chung: Cosmology	
Hadron Colliders		Connecting Dark Energy and	
		Colliders	
6:30—8:30 p.m.	BANQUET	Berkner Hall Cafe (Bldg. 488)	

JUNE 1, 2007					
PLENARY PROGRAM, Large Seminar Room, Chair: D. Zeppenfeld					
9:00—9:50 a.m.	Warped Extra Dimensions	R. S	R. Sundrum		
9:50—10:40 a.m.	Prospects for Higgs Physics at the LHC	K. J	K. Jakobs		
10:40—11:10 a.m. Coffee Break, Large Seminar Lounge					
11:10—12:00 p.m. Prospects for Physics Beyond the Standard Model at the LHC A. De Roeck			A. De Roeck		
**END OF FORUM**					