KAVLI INSTITUTE FOR THEORETICAL PHYSICS
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KITP Conference: Stress-testing the Standard Model at the LHC
(May 23-27, 2016)
Coordinators: Bryan Webber, Eric Laenen, Tom LeCompte, and Doreen Wackeroth

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Monday, May 23, 2016

Standard Model Status, Chair: Bryan Webber (U of Cambridge)

8:50am	Lars Bildsten (KITP)	Welcome
9:00am	Joey Huston (MSU)	LHC Standard Model results 1
9:45am	Jeff Berryhill (FNAL)	LHC Standard Model results 2
10:30am	**Morning Break**	
11:00am	John Campbell (FNAL)	Precision studies of vector boson production
11:45am	Radja BoughezaL (ANL)	NNLO jet phenomenology for the LHC
12:30pm	**Lunch Break**	

PDFs, Jets and Forward Scattering, Chair: Dave Soper (U of Oregon)

2:00pm	Maria Ubiali (U Cambridge)	On the PDF Frontier: NNPDF
2:45pm	Pavel Nadolsky (SMU)	On the PDF Frontier: CTEQ
3:30pm	**Afternoon Break**	
4:00pm	Jesse Thaler (MIT)	Theoretical advances in jet substructure
4:45pm	Ira Rothstein (CMU)	Forward scattering and factorization violation
5:30pm	**SHUTTLE TO BWSCI**	

Tuesday, May 24, 2016

Parton Showers, Matching and Merging, Chair: Lance Dixon (Stanford/SLAC)

9:00am	Dave Soper (U of Oregon)	Ideas behind parton showers, 1984 - 2016
9:45am	Fabio Maltoni (Louvain)	NLO Monte Carlos for collider physics

10:30am	**Morning Break**	
11:00am	Stefan Hoeche (SLAC)	Matching and merging fixed orders and parton showers 1
11:30am	Christian Bauer (LBNL)	Fully exclusive NNLO / NNLL calculations from GENEVA
12:00pm	Eric Laenen (Nikhef/Amsterdam)	Next-to-soft radiative corrections in QCD
12:30pm	**Lunch Break**	

Resummation, Low Energy Tests, Chair: Eric Laenen (Nikhef)

2:00pm	Simone Marzani (Buffalo)	Resummation for precision
2:45pm	Andrew Larkoski (Harvard)	Jet substructure at the precision frontier
3:30pm	**Afternoon Break**	
4:00pm	David Hertzog (U Washington)	Low-energy precision tests of the Standard Model
4:45pm	Ayres Freitas (U Washington)	Standard Model precision tests from high to low energy
5:30pm	**RECEPTION**	
6:00pm	**SPECIAL EVENTS DINNER**	
8:00pm	**SHUTTLE TO BWSCI**	

Wednesday, May 25, 2016

Precision QCD, Chair: Radja Boughezal (ANL)

9:00am	Frank Petriello (Northwestern)	Techniques for NNLO precision
9:45am	Alex Mitov (Cambridge)	Precision QCD predictions
10:30am	**Morning Break**	
11:00am	Gudrun Heinrich (MPI Munich)	Calculations beyond one loop: methods, tools and applications
11:45am	Stefan Weinzierl (Mainz)	Calculations beyond one loop: more methods, tools and applications
12:30pm	**Lunch Break**	
2:00pm	**FREE AFTERNOON-SHUTTLE AVAILABLE TO BWSCI**	

Thursday, May 26, 2016

BSM and Top Physics, Chair: Tom LeCompte (ANL)

9:00am	Frank Golf (UCSB)	LHC BSM results
9:45am	Dan Whiteson (UC Irvine)	Searching for ugly resonances at the LHC
10:30am		**Morning Break**

11:00am	Wolfgang Hollik (MPI Munich)	Precision calculations for BSM physics
11:45am	Martin Beneke (TUM)	Top quark physics
12:30pm		**Lunch Break**

Flavor and Electroweak Physics, Chair: Doreen Wackeroth (SUNY)

2:00pm	Julian Wishahi (TU Dortmund)	LHC flavor physics results
2:45pm	Matthias Neubert (Mainz)	Flavor physics
3:30pm		**Afternoon Break**

4:00pm	Fulvio Piccinini (Pavia)	Electroweak radiative corrections for collider physics
4:45pm	Laura Reina (FSU)	Extended electroweak precision fits and their implications
5:30pm		**RECEPTION**

6:00pm	**SPECIAL EVENTS DINNER**

8:00pm	**SHUTTLE TO BWSCI**

Friday, May 27, 2016

Effective Field Theory and Tools, Chair: Laura Reina (Florida State U)

9:00am	Céline Degrande (IPPP Durham)	Effective theory approach for electroweak boson interactions
9:45am	Marc-André Pleier (Brookhaven)	Multi-boson results and anomalous couplings at the LHC
10:30am		**Morning Break**

11:00am	Walter Giele (FNAL)	Implementing NNLO into MCFM
11:45am	David Kosower (Saclay)	Results from BlackHat
12:30pm		**Lunch Break**

CLOSING SESSION, Chair: Wolfgang Hollik (MPI)

2:00pm	Giulia Zanderighi (CERN/Oxford)	Precision Higgs studies at the LHC

2:45pm Michelangelo Mangano (CERN)   Standard Model Physics at 100 TeV

3:30pm   **SHUTTLE TO BWSCIAlso available to SB Airport and SB Airbus, Goleta location (See Registration Desk to sign up.)**