

# **SCET 2015: XIIth Workshop on Soft-Collinear Effective Theory**



## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

# Welcome

*Wednesday, 25 March 2015 08:50 (10 minutes)*

**Presenter:** LEE, Christopher (Los Alamos National Laboratory)

**Session Classification:** Session 1

Contribution ID: 3

Type: **not specified**

## **Automated NNLL+NLO resummation for jet-veto cross sections**

*Thursday, 26 March 2015 16:40 (25 minutes)*

**Presenter:** ROTHEN, Lorena (University of Bern)

**Session Classification:** Session 8

Contribution ID: 4

Type: **not specified**

## **Explanation of the WW excess at LHC by jet-veto resummation**

*Thursday, 26 March 2015 15:15 (25 minutes)*

**Presenter:** JAISWAL, Prerit (Syracuse University)

**Session Classification:** Session 7

Contribution ID: 5

Type: **not specified**

# **Tau<sup>0</sup>jet resummation in Higgs production at NLL' + NLO**

*Thursday, 26 March 2015 16:10 (25 minutes)*

**Presenter:** GANGAL, Shireen (DESY)

**Session Classification:** Session 8

Contribution ID: 6

Type: **not specified**

## **Renormalization group improved predictions for $t\bar{t}$ + 0 jet production at hadron colliders**

*Thursday, 26 March 2015 14:45 (25 minutes)*

**Presenter:** SHAO, DingYu (University of Bern)

**Session Classification:** Session 7

Contribution ID: 7

Type: **not specified**

## **Toward soft gluon resummation for the associated production of a Higgs boson and a top-quark pair**

*Thursday, 26 March 2015 14:15 (25 minutes)*

**Presenter:** FERROGLIA, Andrea (New York City College of Technology CUNY)

**Session Classification:** Session 7

Contribution ID: 8

Type: **not specified**

## **NNLL-NNLO transverse momentum Higgs distribution arising from gluon fusion**

*Wednesday, 25 March 2015 16:50 (25 minutes)*

**Presenter:** VAIDYA, Varun (Carnegie Mellon University)

**Session Classification:** Session 4



Contribution ID: 9

Type: **not specified**

## **Exclusive radiative decays of W and Z in QCD factorization**

*Friday, 27 March 2015 14:00 (25 minutes)*

**Presenter:** KÖNIG, Matthias (Johannes Gutenberg University)

**Session Classification:** Session 11

Contribution ID: **10**

Type: **not specified**

## **Regge behavior in EFT**

*Wednesday, 25 March 2015 15:20 (25 minutes)*

**Presenter:** MAHMOUD EL-MENOUFI, Basem (University of Massachussets)

**Session Classification:** Session 3

Contribution ID: 11

Type: **not specified**

# **An effective field theory for forward scattering and factorization violation**

*Wednesday, 25 March 2015 14:00 (30 minutes)*

**Presenter:** ROTHSTEIN, Ira (Carnegie Mellon)

**Session Classification:** Session 3

Contribution ID: 12

Type: **not specified**

## **The role of Glauber exchange in SCET and the BFKL equation**

*Wednesday, 25 March 2015 14:40 (30 minutes)*

**Presenter:** FLEMING, Sean (University of Arizona)

**Session Classification:** Session 3

Contribution ID: 13

Type: **not specified**

# **Glauber gluons and multiple parton interactions**

*Wednesday, 25 March 2015 16:15 (25 minutes)*

**Presenter:** GAUNT, Jonathan (DESY)

**Session Classification:** Session 4

Contribution ID: **14**

Type: **not specified**

## **LHC jet shapes**

*Friday, 27 March 2015 12:05 (25 minutes)*

**Presenter:** HORNIG, Andrew (LANL)

**Session Classification:** Session 10

Contribution ID: 15

Type: **not specified**

## **Jet energy loss and modifications in heavy ion collisions**

*Friday, 27 March 2015 09:40 (25 minutes)*

**Presenter:** CHIEN, Yang-Ting (Los Alamos National Laboratory)

**Session Classification:** Session 9

Contribution ID: **16**

Type: **not specified**

## **Inclusive and Exclusive Accuracy in Resummed Cross Sections**

*Thursday, 26 March 2015 17:10 (25 minutes)*

**Presenter:** WALSH, Jon (UC Berkeley)

**Session Classification:** Session 8



Contribution ID: 17

Type: **not specified**

## Parton showers and threshold logs

*Friday, 27 March 2015 09:00 (30 minutes)*

**Presenter:** SOPER, Dave (University of Oregon)

**Session Classification:** Session 9

Contribution ID: **18**

Type: **not specified**

**TBA**

**Presenter:** TACKMANN, Frank (DESY)

Contribution ID: **19**

Type: **not specified**

## **Resummation of quark mass effects in $gg \rightarrow H$**

*Wednesday, 25 March 2015 17:20 (30 minutes)*

**Presenter:** STAHLHOFEN, Maximilian (DESY)

**Session Classification:** Session 4

Contribution ID: 20

Type: **not specified**

## Soft theorems from EFT

*Wednesday, 25 March 2015 09:00 (25 minutes)*

**Presenter:** LARKOSKI, Andrew (MIT)

**Session Classification:** Session 1

Contribution ID: 21

Type: **not specified**

# Removing overlapping phase-space singularities

*Wednesday, 25 March 2015 09:35 (25 minutes)*

**Presenter:** YAN, Kai (Harvard)

**Session Classification:** Session 1

Contribution ID: 22

Type: **not specified**

## The three loop cusp anomalous dimension in QCD

*Wednesday, 25 March 2015 12:05 (25 minutes)*

**Presenter:** HENN, Johannes (IAS)

**Session Classification:** Session 2

Contribution ID: 23

Type: **not specified**

# Renormalization of subleading dijet operators in SCET

*Wednesday, 25 March 2015 10:10 (25 minutes)*

**Presenter:** GOERKE, Ray (University of Toronto)

**Session Classification:** Session 1

Contribution ID: 24

Type: **not specified**

## Soft-gluon current at two loops

*Wednesday, 25 March 2015 11:35 (25 minutes)*

**Presenter:** ZHU, Hua Xing (SLAC)

**Session Classification:** Session 2



Contribution ID: 25

Type: **not specified**

## Soft radiation distributions in massless QCD

*Wednesday, 25 March 2015 11:05 (25 minutes)*

**Presenter:** SCHABINGER, Robert (Johannes Gutenberg University)

**Session Classification:** Session 2

Contribution ID: 26

Type: **not specified**

## **Factorization and resummation for generic jet hierarchies**

*Thursday, 26 March 2015 12:20 (25 minutes)*

**Presenter:** PIETRULEWICZ, Piotr (DESY)

**Session Classification:** Session 6

Contribution ID: 27

Type: **not specified**

## **Resummation of double-differential cross sections**

*Thursday, 26 March 2015 11:45 (25 minutes)*

**Presenter:** ZEUNE, Lisa (University of Amsterdam)

**Session Classification:** Session 6

Contribution ID: 28

Type: **not specified**

## Resummation of non-global logs

*Thursday, 26 March 2015 11:05 (30 minutes)*

**Presenter:** NEILL, Duff (MIT)

**Session Classification:** Session 6

Contribution ID: 29

Type: **not specified**

## Heavy dark matter annihilation from EFT

*Friday, 27 March 2015 15:10 (25 minutes)*

**Presenter:** OVANESYAN, Grigory (University of Massachussets)

**Session Classification:** Session 11

Contribution ID: **30**

Type: **not specified**

## **WIMP annihilation rate from EFT**

*Friday, 27 March 2015 14:35 (25 minutes)*

**Presenter:** BAUMGART, Matthew (Carnegie Mellon University)

**Session Classification:** Session 11

Contribution ID: 31

Type: **not specified**

## **Primary massive quark production in thrust distribution: theory vs MC.**

*Friday, 27 March 2015 10:10 (25 minutes)*

**Presenter:** DEHNADI, Bahman (University of Vienna)

**Session Classification:** Session 9

Contribution ID: 32

Type: **not specified**

## Jet functions and jet algorithms

*Thursday, 26 March 2015 09:00 (25 minutes)*

**Presenter:** CHAY, Junegone (Korea University)

**Session Classification:** Session 5



Contribution ID: 33

Type: **not specified**

## **Power suppressed SCET helicity operators**

*Friday, 27 March 2015 11:00 (25 minutes)*

**Presenter:** KOLODRUBETZ, Dan (MIT)

**Session Classification:** Session 10

Contribution ID: 34

Type: **not specified**

# Fractional jet multiplicity in collider physics

*Thursday, 26 March 2015 09:35 (25 minutes)*

**Presenter:** BERTOLINI, Daniele (UC Berkeley)

**Session Classification:** Session 5

Contribution ID: 35

Type: **not specified**

# **Factorization and resummation of phenomenological jet substructure observables**

*Thursday, 26 March 2015 10:05 (25 minutes)*

**Presenter:** MOULT, Ian (MIT)

**Session Classification:** Session 5

Contribution ID: 36

Type: **not specified**

## Automated calculations of dijet soft functions

*Friday, 27 March 2015 11:35 (25 minutes)*

**Presenter:** TALBERT, Jim (Oxford)

**Session Classification:** Session 10