

**Brookhaven Forum 2015:
Great Expectations, a New
Chapter**

Report of Contributions

Contribution ID: 0

Type: **not specified**

Latest Developments from CMS

Wednesday, 7 October 2015 09:00 (45 minutes)

Presenter: CHOU, John Paul (Rutgers, CMS)

Session Classification: Plenary Program I

Contribution ID: 1

Type: **not specified**

Welcome

Wednesday, 7 October 2015 08:45 (15 minutes)

Presenter: LISSAUER, David (Dep. Assoc. Lab. Dir., BNL)

Session Classification: Plenary Program I

Contribution ID: 2

Type: **not specified**

ATLAS at the Beginning of Run II

Wednesday, 7 October 2015 09:45 (45 minutes)

Presenter: ARCE, Ayana (Duke, ATLAS)

Session Classification: Plenary Program I

Contribution ID: 3

Type: **not specified**

Overview of the Latest Developments in Precision QCD

Wednesday, 7 October 2015 11:00 (45 minutes)

Presenter: BOUGHEZAL, Radja (Argonne)

Session Classification: Plenary Program II

Contribution ID: 4

Type: **not specified**

Planck Results

Wednesday, 7 October 2015 11:45 (45 minutes)

Presenter: BARTLETT, James (JPL, PLANCK)

Session Classification: Plenary Program II

Contribution ID: 5

Type: **not specified**

Highlights from Flavor Physics

Thursday, 8 October 2015 09:00 (45 minutes)

Presenter: TEUBERT, Frederic (CERN, LHCb)

Session Classification: Plenary Program I

Contribution ID: 6

Type: **not specified**

Inflation, SUSY Breaking, and Cosmological Attractors

Thursday, 8 October 2015 09:45 (45 minutes)

Presenter: LINDE, Andrei (Stanford)

Session Classification: Plenary Program I

Contribution ID: 7

Type: **not specified**

LBNF/DUNE: An Experimental Program in Neutrino Oscillations, Nucleon Decay and Particle Astrophysics

Thursday, 8 October 2015 11:00 (45 minutes)

Presenter: STRAIT, James (Fermilab)

Session Classification: Plenary Program II

Contribution ID: 8

Type: **not specified**

Indirect Searches for Dark Matter with the Fermi Large Area Telescope

Thursday, 8 October 2015 11:45 (45 minutes)

Presenter: CHARLES, Eric (KIPAC/SLAC, FERMI)

Session Classification: Plenary Program II

Contribution ID: 9

Type: **not specified**

The Storage Ring Proton EDM Experiment: Most Sensitive CP-violation Experiment

Thursday, 8 October 2015 13:30 (45 minutes)

Presenter: SEMERTZIDIS, Yannis (CAPP/IBS, KAIST)

Session Classification: Plenary Session III

Contribution ID: **10**

Type: **not specified**

Direct Dark Matter Detection

Friday, 9 October 2015 09:15 (45 minutes)

Presenter: BAUDIS, Laura (UZurich)

Session Classification: Plenary Program I

Contribution ID: 11

Type: **not specified**

Searching for New Paradigms after the Higgs

Friday, 9 October 2015 10:00 (45 minutes)

Presenter: POMAROL, Alex (CERN/UAB)

Session Classification: Plenary Program I

Contribution ID: 12

Type: **not specified**

Physics at Future Colliders

Presenter: HAN, Tao (UPittsburgh)

Contribution ID: 13

Type: **not specified**

Physics at Future Colliders

Friday, 9 October 2015 11:15 (45 minutes)

Presenter: HAN, Tao (UPittsburgh)

Session Classification: Plenary Program II

Contribution ID: 14

Type: **not specified**

Closing Remarks

Contribution ID: 15

Type: **not specified**

First SM Results at 13 TeV, CMS

Presenter: BELLONI, Alberto (UMaryland)

Contribution ID: 16

Type: **not specified**

Lattice QCD with General Background Electromagnetic Fields: Implementation and Applications

Presenter: DAVOUDI, Zohreh (MIT)

Contribution ID: 17

Type: **not specified**

Hadronic Contributions (HVP, LbL) for Muon $g-2$ from Lattice QCD

Presenter: LEHNER, Christoph (BNL)

Contribution ID: **18**

Type: **not specified**

First SM Results at 13 TeV, ATLAS

Presenter: SHIMIZU, Shima (UKobe)

Contribution ID: 19

Type: **not specified**

$J_{\{E_T\}^{\{\text{rm II}\}}}$: A Two-Prong Jet Algorithm

Presenter: LU, Ran (University of Wisconsin)

Contribution ID: 20

Type: **not specified**

Naturalness and Supersymmetry

Wednesday, 7 October 2015 13:30 (20 minutes)

Presenter: BALAZS, Csaba (Monash)

Session Classification: Parallel Session

Contribution ID: 21

Type: **not specified**

EFT-Naturalness: Effective Field Theory Analysis of Higgs Naturalness

Wednesday, 7 October 2015 13:50 (20 minutes)

Presenter: BAR-SHALOM, Shaouly (Technion)

Session Classification: Parallel Session

Contribution ID: 22

Type: **not specified**

A No-Loose Theorem for Naturalness

Wednesday, 7 October 2015 14:10 (20 minutes)

Presenter: CURTIN, David (UMaryland)

Session Classification: Parallel Session

Contribution ID: 23

Type: **not specified**

Testing Single RPV Squark Production at the LHC

Wednesday, 7 October 2015 14:30 (20 minutes)

Presenter: MONTEUX, Angelo (Rutgers)

Session Classification: Parallel Session

Contribution ID: 24

Type: **not specified**

Lattice Study of Walking Dynamics in Many-flavor QCD

Wednesday, 7 October 2015 14:50 (20 minutes)

Presenter: OHKI, Hiroshi (BNL)

Session Classification: Parallel Session

Contribution ID: 25

Type: **not specified**

Exotic Quarks in Twin Higgs Models

Wednesday, 7 October 2015 15:10 (20 minutes)

Presenter: TSAI, Yuhsin (UMaryland)

Session Classification: Parallel Session

Contribution ID: 27

Type: **not specified**

First Top results at 13 TeV, ATLAS

Wednesday, 7 October 2015 13:30 (20 minutes)

Presenter: DANNINGER, Matthias (UBC)

Session Classification: Parallel Session

Contribution ID: 28

Type: **not specified**

Non-Abelian Dark Matter and Dark Radiation

Wednesday, 7 October 2015 13:30 (20 minutes)

Presenter: BUEN-ABAD, Manuel (BostonU)

Session Classification: Parallel Session

Contribution ID: 29

Type: **not specified**

Interplay Between Inclusive and Exclusive $b \rightarrow sll$ Decays

Wednesday, 7 October 2015 13:30 (20 minutes)

Presenter: LUNGHI, Enrico (IndianaU)

Session Classification: Parallel Session

Contribution ID: **30**

Type: **not specified**

Using Unitarity to Make Precision Top Measurements

Wednesday, 7 October 2015 13:50 (20 minutes)

Presenter: DROR, Jeff (Cornell)

Session Classification: Parallel Session

Contribution ID: 31

Type: **not specified**

Improved Estimate of Proton Lifetime

Wednesday, 7 October 2015 13:50 (20 minutes)

Presenter: SHINTANI, Eigo (MainzU)

Session Classification: Parallel Session

Contribution ID: 32

Type: **not specified**

Recent Results from Belle

Wednesday, 7 October 2015 13:50 (20 minutes)

Presenter: WANG, Xiaolong (VTU)

Session Classification: Parallel Session

Contribution ID: 33

Type: **not specified**

Associate Production of a Top Pair and a Higgs Boson Beyond NLO by Means of SCET Methods

Wednesday, 7 October 2015 14:10 (20 minutes)

Presenter: FERROGLIA, Andrea (NYCCT CUNY)

Session Classification: Parallel Session

Contribution ID: 34

Type: **not specified**

Tight Scrutiny of Baryogenesis

Wednesday, 7 October 2015 14:10 (20 minutes)

Presenter: RAMANI, Harikrishnan (SBU)

Session Classification: Parallel Session

Contribution ID: 35

Type: **not specified**

Recent Study of B-meson Decays with the BABAR Detector

Wednesday, 7 October 2015 14:10 (20 minutes)

Presenter: WILSON, Fergus (RAL)

Session Classification: Parallel Session

Contribution ID: 36

Type: **not specified**

First Top Results at 13 TeV, CMS

Wednesday, 7 October 2015 14:30 (20 minutes)

Presenter: GARCIA-BELLIDO, Aran (URochester)

Session Classification: Parallel Session

Contribution ID: 37

Type: **not specified**

Baryon Number Violation via Majorana Neutrinos from Early Universe to LHC

Wednesday, 7 October 2015 14:30 (20 minutes)

Presenter: ZHANG, Yue (CalTech)

Session Classification: Parallel Session

Contribution ID: 38

Type: **not specified**

Latest Results on $R(D^*)$ and V_{ub} from Semileptonic Decays at LHCb

Wednesday, 7 October 2015 14:30 (20 minutes)

Presenter: SUTCLIFFE, William (Imperial College)

Session Classification: Parallel Session

Contribution ID: 39

Type: **not specified**

Top Flavor Changing Interactions with Neutral Higgs Bosons

Wednesday, 7 October 2015 14:50 (20 minutes)

Presenter: KAO, Chung (UOklahoma)

Session Classification: Parallel Session

Contribution ID: 40

Type: **not specified**

Isocurvature Perturbation of Weakly Interacting Massive Particles and Small Scale Structure

Wednesday, 7 October 2015 14:50 (20 minutes)

Presenter: SHIN, Chang Sub (Rutgers)

Session Classification: Parallel Session

Contribution ID: 41

Type: **not specified**

Mixed Stops and the ATLAS on-Z Excess

Wednesday, 7 October 2015 15:10 (20 minutes)

Presenter: COLLINS, Jack (Cornell)

Session Classification: Parallel Session

Contribution ID: 42

Type: **not specified**

Usefulness of Effective Field Theory in Higgs Plus Jet Production

Presenter: LEWIS, Ian (SLAC)

Contribution ID: 43

Type: **not specified**

O(1) GeV Dark Matter in SUSY and a Very Light Pseudoscalar at the LHC

Presenter: KIM, Doyoun (Asia Pacific Center for Theoretical Physics)

Contribution ID: 44

Type: **not specified**

Heavy Diboson Searches from ATLAS

Presenter: CAMPOVERDE, Angel (Stony Brook University)

Contribution ID: 45

Type: **not specified**

Higgs CP Violation from Vectorlike Quarks

Presenter: CHEN, Chien-Yi (University of Victoria / Perimeter Institute)

Contribution ID: 46

Type: **not specified**

Isocurvature Perturbation of Weakly Interacting Massive Particles and Small Scale Structure

Presenter: SHIN, Chang Sub (Rutgers)

Contribution ID: 47

Type: **not specified**

Contributions of Vectorlike Leptons in the Diboson-like Signals

Presenter: LI, Heifeng (Stony Brook University)

Contribution ID: 48

Type: **not specified**

Is the Higgs a Composite Scalar?

Presenter: WEINBERG, Evan (Boston University)

Contribution ID: 49

Type: **not specified**

Accurate, Realistic, and Automatic Predictions for Dark Matter Production at the LHC

Presenter: ZHANG, Cen (Brookhaven National Laboratory)

Contribution ID: 50

Type: **not specified**

Heavy Higgs Searches from CMS

Presenter: POLLACK, Brian (Northwestern University)

Contribution ID: 51

Type: **not specified**

The Composite Twin Higgs

Presenter: GELLER, Michael (Technion)

Contribution ID: 52

Type: **not specified**

Constraining Dark Matter-electron Interactions from Structure Formation

Presenter: ZHONG, Yiming

Contribution ID: 53

Type: **not specified**

Contributions of Vectorlike Leptons in the Diboson-like Signals

Presenter: SHIN, Seodong (Indiana University)

Contribution ID: 54

Type: **not specified**

Calculating nEDM using Lattice QCD

Presenter: BHATTACHARYA, Tanmoy (Los Alamos National Laboratory)

Contribution ID: 55

Type: **not specified**

Energy Peak: Back to the Galactic Center GeV Gamma-ray Excess

Presenter: KIM, Doojin (University of Florida)

Contribution ID: 56

Type: **not specified**

Searches for Disboson Resonances at CMS

Presenter: TRAN, Nhan (Fermilab)

Contribution ID: 57

Type: **not specified**

Wavelets at the Galactic Center

Presenter: MCDERMOTT, Sam (Stony Brook University)

Contribution ID: 58

Type: **not specified**

Resummation Predictions for WW Production at the LHC

Presenter: JAISWAL, Prerit (Brown University)

Contribution ID: 59

Type: **not specified**

Probing Inflation, Neutrinos, and Dark Energy with the Cosmic Microwave Background: ACTPol and Beyond

Thursday, 8 October 2015 14:15 (45 minutes)

Presenter: MCMAHON, Jeff (UMichigan)

Session Classification: Plenary Session III

Contribution ID: **60**

Type: **not specified**

First SM Results at 13 TeV, CMS

Thursday, 8 October 2015 15:30 (20 minutes)

Presenter: BELLONI, Alberto (UMaryland)

Session Classification: Parallel Session

Contribution ID: **61**

Type: **not specified**

Usefulness of Effective Field Theory in Higgs Plus Jet Production

Thursday, 8 October 2015 15:30 (20 minutes)

Presenter: LEWIS, Ian (SLAC)

Session Classification: Parallel Session

Contribution ID: 62

Type: **not specified**

O(1) GeV Dark Matter in SUSY and a Very Light Pseudoscalar at the LHC

Thursday, 8 October 2015 15:30 (20 minutes)

Presenter: KIM, Doyoun (APCTP)

Session Classification: Parallel Session

Contribution ID: 63

Type: **not specified**

Heavy Diboson Searches from ATLAS

Thursday, 8 October 2015 15:30 (20 minutes)

Presenter: CAMPOVERDE, Angel (SBU)

Session Classification: Parallel Session

Contribution ID: 64

Type: **not specified**

Lattice QCD with General Background Electromagnetic Fields: Implementation and Applications

Thursday, 8 October 2015 15:50 (20 minutes)

Presenter: DAVOUDI, Zohreh (MIT)

Session Classification: Parallel Session

Contribution ID: 65

Type: **not specified**

Higgs CP Violation from Vectorlike Quarks

Thursday, 8 October 2015 15:50 (20 minutes)

Presenter: CHEN, Chien-Yi (UV/PI)

Session Classification: Parallel Session

Contribution ID: 66

Type: **not specified**

Wavelets at the Galactic Center

Thursday, 8 October 2015 15:50 (20 minutes)

Presenter: MCDERMOTT, Sam (SBU)

Session Classification: Parallel Session

Contribution ID: 67

Type: **not specified**

Search for High-mass Higgs Boson in WW Channel with ATLAS Detector Using LHC run-1 Data

Thursday, 8 October 2015 15:50 (20 minutes)

Presenter: LI, Haifeng (SBU)

Session Classification: Parallel Session

Contribution ID: 68

Type: **not specified**

Standard Model Prediction for Direct CP-violation in Kaon Decays

Thursday, 8 October 2015 17:10 (20 minutes)

Presenter: KELLY, Christopher (Brookhaven National Laboratory)

Session Classification: Parallel Session

Contribution ID: 69

Type: **not specified**

First SM Results at 13 TeV, ATLAS

Thursday, 8 October 2015 16:10 (20 minutes)

Presenter: SHIMIZU, Shima (UKobe)

Session Classification: Parallel Session

Contribution ID: 70

Type: **not specified**

Is the Higgs a Composite Scalar?

Thursday, 8 October 2015 16:10 (20 minutes)

Presenter: WEINBERG, Evan (BostonU)

Session Classification: Parallel Session

Contribution ID: 71

Type: **not specified**

Accurate, Realistic, and Automatic Predictions for Dark Matter Production at the LHC

Thursday, 8 October 2015 16:10 (20 minutes)

Presenter: ZHANG, Cen (BNL)

Session Classification: Parallel Session

Contribution ID: 72

Type: **not specified**

Hadronic Light-by-Light Contribution to Muon $g-2$ From Lattice QCD

Thursday, 8 October 2015 16:30 (20 minutes)

Presenter: LEHNER, Christoph (BNL)

Session Classification: Parallel Session

Contribution ID: 73

Type: **not specified**

The Composite Twin Higgs

Thursday, 8 October 2015 16:30 (20 minutes)

Presenter: GELLER, Michael (Technion)

Session Classification: Parallel Session

Contribution ID: 74

Type: **not specified**

Gravothermal Evolution of Galactic Dark Matter Halos with Velocity-dependent Self-interactions

Thursday, 8 October 2015 16:30 (20 minutes)

Presenter: ZHONG, Yiming (SBU)

Session Classification: Parallel Session

Contribution ID: 75

Type: **not specified**

Contributions of Vectorlike Leptons in the Diboson-like Signals

Thursday, 8 October 2015 16:30 (20 minutes)

Presenter: SHIN, Seodong (IndianaU)

Session Classification: Parallel Session

Contribution ID: 76

Type: **not specified**

$J_{\{E_T\}^{\{\text{rm II}\}}}$: A Two-Prong Jet Algorithm

Thursday, 8 October 2015 16:50 (20 minutes)

Presenter: LU, Ran (UWisconsin)

Session Classification: Parallel Session

Contribution ID: 77

Type: **not specified**

Calculating nEDM using Lattice QCD

Thursday, 8 October 2015 16:50 (20 minutes)

Presenter: BHATTACHARYA, Tanmoy (LANL)

Session Classification: Parallel Session

Contribution ID: 78

Type: **not specified**

Energy Peak: Back to the Galactic Center GeV Gamma-ray Excess

Thursday, 8 October 2015 16:50 (20 minutes)

Presenter: KIM, Doojin (UFlorida)

Session Classification: Parallel Session

Contribution ID: 79

Type: **not specified**

Searches for Disboson Resonances at CMS

Thursday, 8 October 2015 16:50 (20 minutes)

Presenter: TRAN, Nhan (FNAL)

Session Classification: Parallel Session

Contribution ID: **80**

Type: **not specified**

Wavelets at the Galactic Center

Presenter: MCDERMOTT, Sam (SBU)

Contribution ID: **81**

Type: **not specified**

Resummation Predictions for WW Production at the LHC

Presenter: JAISWAL, Prerit (BrownU)

Contribution ID: **82**

Type: **not specified**

Determination of $|V_{ub}/V_{cb}|$ Using Baryonic Decays

Wednesday, 7 October 2015 14:50 (20 minutes)

Presenter: Prof. MEINEL, Stefan (UArizona / RBRC)

Session Classification: Parallel Session

Contribution ID: **83**

Type: **not specified**

Closing Remarks

Friday, 9 October 2015 12:00 (15 minutes)

Presenters: SONI, Amarjit (BNL); DAVOUDIASL, Hooman (BNL)

Session Classification: Closing Remarks

Contribution ID: **84**

Type: **not specified**

Heavy Higgs Searches from CMS

Thursday, 8 October 2015 16:10 (20 minutes)

Presenter: POLLACK, Brian (NorthwesternU)

Session Classification: Parallel Session

Contribution ID: 85

Type: **not specified**

Probing the Standard Model with $B \rightarrow K(^*)l+l^-$ decays at LHCb

Thursday, 8 October 2015 17:10 (20 minutes)

Presenter: WILSON, Fergus (RAL)

Session Classification: Parallel Session

Contribution ID: **86**

Type: **not specified**

Physics Prospects at Belle II

Wednesday, 7 October 2015 15:10 (20 minutes)

Presenter: ROSENFELD, Carl (USC)

Session Classification: Parallel Session

Contribution ID: 87

Type: **not specified**

Stealth Dark Matter

Thursday, 8 October 2015 17:10 (20 minutes)

Presenter: KRIBS, Graham (University of Oregon)

Session Classification: Parallel Session

Contribution ID: **88**

Type: **not specified**

Resummation Predictions for WW Production at the LHC

Thursday, 8 October 2015 17:10 (20 minutes)

Presenter: JAISWAL, Prerit (Syracuse University)

Session Classification: Parallel Session