

**Informal DOE Briefing :  
USCMS/FNAL Computing  
Innovation towards HL-LHC**

**Report of Contributions**

Contribution ID: 0

Type: **not specified**

## Introduction, Goals for the Meeting

*Thursday, 13 June 2019 12:00 (10 minutes)*

**Presenters:** Dr BAUERDICK, Lothar (Fermilab); Prof. SPIROPULU, Maria (Caltech)

Contribution ID: 1

Type: **not specified**

# Innovation and Engineering for HL-LHC Computing Infrastructure

*Thursday, 13 June 2019 12:10 (25 minutes)*

Computing HL-LHC challenges and the envisioned computation ecosystem to address them

**Presenters:** Dr BAUERDICK, Lothar (Fermilab); Dr GUTSCHE, Oliver (Fermi National Accelerator Laboratory)

Contribution ID: 2

Type: **not specified**

## Strategy towards HL-LHC Computing, Next Steps

*Thursday, 13 June 2019 15:00 (20 minutes)*

**Presenters:** Dr BAUERDICK, Lothar (Fermilab); Prof. SPIROPULU, Maria (Caltech); Dr GUTSCHE, Oliver (Fermi National Accelerator Laboratory)

Contribution ID: 3

Type: **not specified**

## **Executive Session/Adjourn**

*Thursday, 13 June 2019 15:20 (30 minutes)*

Contribution ID: 4

Type: **not specified**

## **Graph Neural Networks for Next Generation Detector Reconstruction: Lindsey Gray**

Contribution ID: 5

Type: **not specified**

## **Advanced Data Analysis and Simulation Methods**

*Thursday, 13 June 2019 13:25 (20 minutes)*

**Presenters:** PATA, Josep (Caltech); PEDRO, Kevin (Fermilab); SMITH, Nicholas (Fermilab)

**Session Classification:** Innovation & Engineering (I)

Contribution ID: 6

Type: **not specified**

## Machine Learning on FPGAs: Nhan Tran



Contribution ID: 7

Type: **not specified**

## **Accelerating Higgs→bb Analysis with Coffea: Nick Smith**

Contribution ID: 8

Type: **not specified**

## **"on-chip" computation (FPGA-based framework)**

*Thursday, 13 June 2019 12:35 (20 minutes)*

**Presenters:** DUARTE, Javier (Fermilab); BACHTIS, Michail

**Session Classification:** Innovation & Engineering (I)

Contribution ID: 9

Type: **not specified**

# Machine Learning Ecosystem

*Thursday, 13 June 2019 14:30 (15 minutes)*

**Presenter:** Dr VLIMANT, Jean-Roch (California Institute of Technology)

**Session Classification:** Innovation & Engineering (II)

Contribution ID: **10**

Type: **not specified**

## Software Framework and HPC

*Thursday, 13 June 2019 14:15 (15 minutes)*

**Presenter:** KORTELAJINEN, Matti

**Session Classification:** Innovation & Engineering (II)

Contribution ID: 11

Type: **not specified**

## **Data Organization, Management, and Access**

*Thursday, 13 June 2019 14:00 (15 minutes)*

**Presenter:** BOCKELMAN, Brian

**Session Classification:** Innovation & Engineering (II)

Contribution ID: 12

Type: **not specified**

## Mapping Computing Innovation onto HL-LHC Needs

*Thursday, 13 June 2019 14:45 (15 minutes)*

**Presenter:** KLUTE, Markus (MIT)

**Session Classification:** Innovation & Engineering (II)

Contribution ID: 13

Type: **not specified**

## **Accelerating Higgs- $\rightarrow\mu\mu$ and optimizing computational Kernels: Joosep Pata**

Contribution ID: 14

Type: **not specified**

## **Advanced Methods for Data Processing and Reconstruction**

*Thursday, 13 June 2019 12:55 (30 minutes)*

**Presenters:** REINSVOLD HALL, Allison; GRAY, Lindsey (Fermilab); TRAN, Nhan (FNAL)

**Session Classification:** Innovation & Engineering (I)