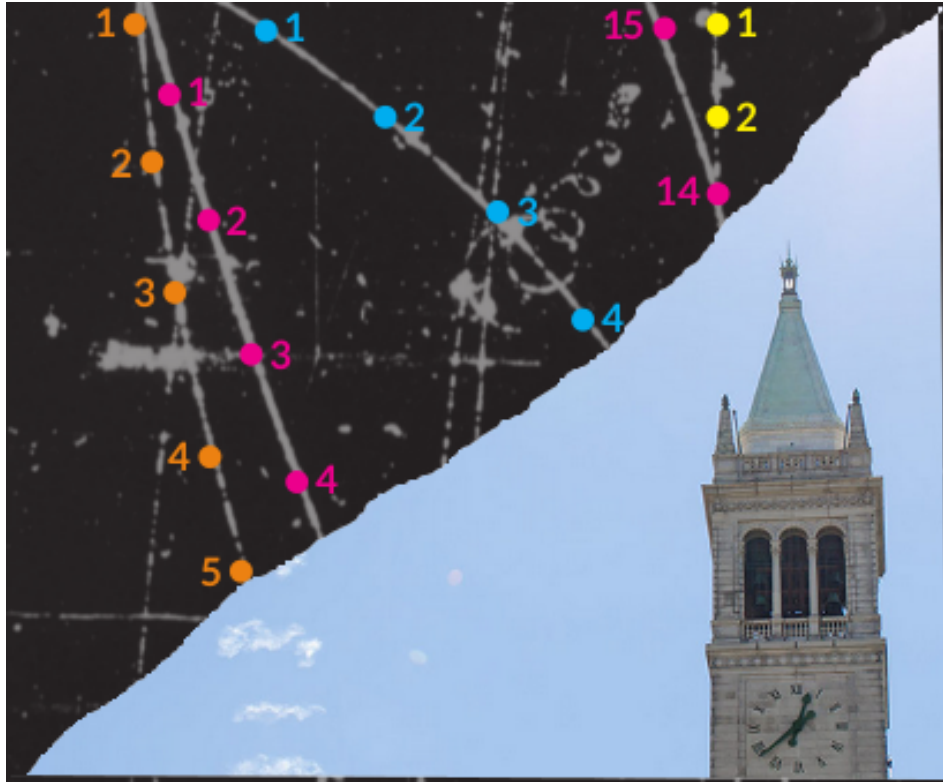


# Connecting The Dots 2015



## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Public Lecture

*Tuesday, 10 February 2015 17:30 (1 hour)*

On sound restoration and relationship to particle physics pattern recognition

**Presenter:** HABER, Carl

Contribution ID: 2

Type: **not specified**

## **Artificial retina processor for track reconstruction**

*Wednesday, 11 February 2015 09:30 (30 minutes)*

**Presenter:** CENCI, Riccadro (INFN Pisa)

**Session Classification:** Session 5

Contribution ID: 3

Type: **not specified**

## **Space Object Tracking and Characterization**

*Monday, 9 February 2015 16:00 (45 minutes)*

**Presenter:** HENDRIX, Doug (ExoAnalytic Solutions, Inc.)

**Session Classification:** Session 2

Contribution ID: 4

Type: **not specified**

## **Big data algorithms for compressed sensing with missing data**

**Presenter:** RECHT, Ben (UC Berkeley)

Contribution ID: 5

Type: **not specified**

## **Pattern recognition in LAr TPCs for neutrino experiments**

*Tuesday, 10 February 2015 14:00 (30 minutes)*

**Presenter:** USHER, Tracy (SLAC)

**Session Classification:** Session 4

Contribution ID: 6

Type: **not specified**

## **LHCb tracking for the Phase-1 trigger scheme (HLT)**

*Monday, 9 February 2015 10:00 (30 minutes)*

**Presenter:** HEAD, Timothy (EPF Lausanne)

**Session Classification:** Session 1

Contribution ID: 7

Type: **not specified**

## **Track reconstruction challenges for future linear colliders**

*Tuesday, 10 February 2015 10:00 (30 minutes)*

**Presenter:** GRAF, Norman (SLAC)

**Session Classification:** Session 3



Contribution ID: 8

Type: **not specified**

## Overview of associative memory tracking devices

*Wednesday, 11 February 2015 11:00 (30 minutes)*

**Presenter:** ANNOVI, Alberto (INFN Pisa)

**Session Classification:** Session 5

Contribution ID: 9

Type: **not specified**

## Low-momentum tracking for Mu2e

*Tuesday, 10 February 2015 14:30 (30 minutes)*

**Presenter:** BROWN, David

**Session Classification:** Session 4

Contribution ID: **10**

Type: **not specified**

## **Jet images: Computer vision techniques for jet tagging**

*Monday, 9 February 2015 14:30 (30 minutes)*

**Presenter:** KAGAN, Michael (SLAC)

**Session Classification:** Session 2

Contribution ID: 11

Type: **not specified**

## **Bayesian model-based clustering**

*Monday, 9 February 2015 15:00 (30 minutes)*

**Presenter:** FRÜHWIRTH-SCHNATTER, Sylvia (WU Vienna)

**Session Classification:** Session 2

Contribution ID: 12

Type: **not specified**

## **A HEP pattern recognition challenge on Kaggle ? Experience from the ATLAS Higgs Machine Learning challenge**

*Monday, 9 February 2015 12:00 (30 minutes)*

**Presenter:** ROUSSEAU, David (IN2P3 LAL)

**Session Classification:** Session 1

Contribution ID: 14

Type: **not specified**

## **A specialized processor for track reconstruction at the LHC crossing rate**

*Tuesday, 10 February 2015 11:00 (30 minutes)*

**Presenter:** STRACKA, simone (INFN Pisa)

**Session Classification:** Session 3

Contribution ID: 15

Type: **not specified**

## **A New Concept of Vertically Integrated Pattern Recognition Associative Memory**

*Wednesday, 11 February 2015 11:30 (30 minutes)*

**Presenter:** LIU, Ted (Fermilab)

**Session Classification:** Session 5

Contribution ID: 16

Type: **not specified**

## **A fast and parallel three-dimensional track fit with multiple scattering for Mu3e**

*Tuesday, 10 February 2015 15:00 (30 minutes)*

**Presenter:** KIEHN, Moritz (U. Heidelberg)

**Session Classification:** Session 4



Contribution ID: 17

Type: **not specified**

## **ALICE HLT GPU-based cellular automaton track finder**

*Monday, 9 February 2015 11:00 (30 minutes)*

**Presenter:** ROHR, David (Frankfurt IAS)

**Session Classification:** Session 1

Contribution ID: **18**

Type: **not specified**

## **Deep Learning for HEP Data Analysis**

*Monday, 9 February 2015 14:00 (30 minutes)*

**Presenter:** SADOWSKI, Peter (UC Irvine)

**Session Classification:** Session 2

Contribution ID: 19

Type: **not specified**

## **ATLAS experiment recent and planned tracking improvements**

*Wednesday, 11 February 2015 10:00 (30 minutes)*

**Presenter:** MORLEY, Anthony (KTH)

**Session Classification:** Session 5

Contribution ID: 20

Type: **not specified**

## **CMS experiment recent and planned improvements**

*Monday, 9 February 2015 09:30 (30 minutes)*

**Presenter:** BRONDOLIN, Erica (Austrian Academy of Sciences)

**Session Classification:** Session 1

Contribution ID: 21

Type: **not specified**

## **ATLAS Track reconstruction challenges for HL-LHC**

*Tuesday, 10 February 2015 09:00 (30 minutes)*

**Presenter:** LIEBIG, Wolfgang (U. Bergen & CERN)

**Session Classification:** Session 3

Contribution ID: 22

Type: **not specified**

## **L1 track trigger for CMS at HL-LHC**

*Tuesday, 10 February 2015 09:30 (30 minutes)*

**Presenter:** JINDARIANI, Sergo (Fermilab)

**Session Classification:** Session 3

Contribution ID: 23

Type: **not specified**

## Welcome and Introduction

*Monday, 9 February 2015 09:15 (15 minutes)*

**Presenter:** HEINEMANN, Beate

**Session Classification:** Session 1

Contribution ID: 25

Type: **not specified**

## **Fuzzy clustering algorithms for jet reconstruction**

*Wednesday, 11 February 2015 09:00 (30 minutes)*

**Presenter:** STANSBURY, Conrad (Stanford U.)

**Session Classification:** Session 5



Contribution ID: 26

Type: **not specified**

## **Update on Belle-II tracking status of preparation, including Pixel readout and data reduction**

*Monday, 9 February 2015 11:30 (30 minutes)*

**Presenter:** HECK, Martin (KIT)

**Session Classification:** Session 1

Contribution ID: 27

Type: **not specified**

## Discussion

*Tuesday, 10 February 2015 12:00 (30 minutes)*

**Presenter:** ELSING, Markus (CERN)

**Session Classification:** Session 3

Contribution ID: 28

Type: **not specified**

## Discussion

Contribution ID: 29

Type: **not specified**

**HOLD**

Contribution ID: **30**

Type: **not specified**

## Final remarks

*Wednesday, 11 February 2015 12:30 (30 minutes)*

**Session Classification:** Session 5

Contribution ID: 31

Type: **not specified**

## **Constrained fits with non-normal distributions**

*Tuesday, 10 February 2015 11:30 (30 minutes)*

**Presenter:** FRÜHWIRTH, Rudolf (Austrian Academy of Sciences)

**Session Classification:** Session 3

Contribution ID: 32

Type: **not specified**

## Disucussion

*Tuesday, 10 February 2015 15:30 (30 minutes)*

**Presenter:** DOMINGUEZ, Aaron (U. of Nebraska)

**Session Classification:** Session 4

Contribution ID: 33

Type: **not specified**

## Discussion

*Wednesday, 11 February 2015 12:00 (30 minutes)*

**Presenter:** RISTORI, Luciano (INFN Pisa)

**Session Classification:** Session 5



Contribution ID: **34**

Type: **not specified**

## **Reception and Dinner**

*Monday, 9 February 2015 18:00 (3 hours)*

Contribution ID: 35

Type: **not specified**

## Practical information

*Monday, 9 February 2015 09:00 (15 minutes)*

**Presenter:** GARCIA-SCIVERES, Maurice

**Session Classification:** Session 1

Contribution ID: 36

Type: **not specified**

## **Planning session on track finding challenge**

Contribution ID: 37

Type: **not specified**

## **Planing session for track finding challenge**

*Tuesday, 10 February 2015 08:30 (30 minutes)*

Contribution ID: **38**

Type: **not specified**

## **Followup meeting #1**

*Wednesday, 11 February 2015 14:00 (10 minutes)*

**Session Classification:** Followup meetings

Contribution ID: 39

Type: **not specified**

## **Followup meeting #2**

*Wednesday, 11 February 2015 14:10 (10 minutes)*

**Session Classification:** Followup meetings

Contribution ID: **40**

Type: **not specified**

## **CTD2016**

*Wednesday, 11 February 2015 14:20 (10 minutes)*

**Session Classification:** Followup meetings