## sPHENIX Software Mega-workfest

## **Report of Contributions**

Contribution ID: 2 Type: not specified

## Software and computing status and workfest goals

Monday, 13 January 2020 09:10 (20 minutes)

**Presenter:** PINKENBURG, Chris (BNL)

Session Classification: Plenary

Contribution ID: 3 Type: not specified

## Jet status and workfest goals

Monday, 13 January 2020 09:30 (30 minutes)

Presenters: PEREPELITSA, Dennis (University of Colorado Boulder); REED, Rosi (Lehigh Univer-

sity)

Session Classification: Plenary

Contribution ID: 4 Type: **not specified** 

## Tracking status and workfest goals

Monday, 13 January 2020 10:00 (30 minutes)

Presenters: FRAWLEY, Anthony (Florida State University); ROLAND, Christof (MIT)

Session Classification: Plenary

Contribution ID: 5 Type: **not specified** 

### sPhenix Tracking

Monday, 13 January 2020 11:00 (30 minutes)

Discuss schedule of tracking work.

Presenters: FRAWLEY, Anthony (Florida State University); ROLAND, Christof (MIT)

Session Classification: Track-1 working session: tracking/TPC calibration

Contribution ID: 6 Type: not specified

#### **ACTS Introduction and discussion**

Monday, 13 January 2020 11:30 (1 hour)

**Presenter:** Dr SALZBURGER, Andreas

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 7 Type: **not specified** 

## **ALICE Tracking and Data Reduction**

Monday, 13 January 2020 14:00 (40 minutes)

Presenters: Dr ROHR, David; ROHR, David (CERN)

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 8 Type: not specified

## **CA Tracking and KFParticle**

Monday, 13 January 2020 14:40 (40 minutes)

Presenter: Prof. KISEL, Ivan

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 9 Type: not specified

#### **ALICE TPC Calibrations**

Monday, 13 January 2020 16:30 (30 minutes)

**Presenter:** Dr WIECHULA, Jens

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 10 Type: not specified

## **ALICE Space Charge Distortions**

Monday, 13 January 2020 17:00 (30 minutes)

**Presenter:** Dr HELLBAER, Ernst

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 11 Type: not specified

## sPhenix Space Charge Distortions

Monday, 13 January 2020 17:30 (30 minutes)

Presenter: CORLISS, Ross (SBU)

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 12 Type: not specified

#### **STAR Track Reconstruction**

Monday, 13 January 2020 15:20 (40 minutes)

**Primary author:** KE, Hongwei (BNL)

Presenter: KE, Hongwei (BNL)

Session Classification: Track-1 working session: tracking/TPC calibration

Contribution ID: 13 Type: not specified

#### **Collaboration news**

Friday, 17 January 2020 10:50 (20 minutes)

Presenters: MORRISON, David (BNL); ROLAND, Gunther (MIT)

Session Classification: IB Meeting

Contribution ID: 14 Type: not specified

## **Project news**

Friday, 17 January 2020 11:10 (20 minutes)

**Presenters:** O'BRIEN, Edward (BNL); HAGGERTY, John (Brookhaven National Laboratory)

Session Classification: IB Meeting

Contribution ID: 15 Type: not specified

### Report from Inclusion and Diversity board

Friday, 17 January 2020 10:00 (20 minutes)

**Presenter:** GREENE, Senta (Vanderbilt University)

Session Classification: IB Meeting

Contribution ID: 16 Type: not specified

#### Presentations from new institutions

Friday, 17 January 2020 09:20 (40 minutes)

Presenters: SILVERMYR, David; LU, Rong-Shyang; LIM, Sanghoon (University of Colorado Boul-

der)

Session Classification: IB Meeting

Contribution ID: 17 Type: not specified

### **ACTS Questions and Answers Session**

Wednesday, 15 January 2020 09:30 (2h 30m)

**Session Classification:** Track-1 working session: tracking/TPC calibration

Contribution ID: 18 Type: not specified

## Introduction to BNL Computational Science Initiative

Wednesday, 15 January 2020 09:00 (30 minutes)

**Primary authors:** LIN, Meifeng (Brookhaven National Laboratory); LIN, Meifeng (Brookhaven National Laboratory)

**Presenters:** LIN, Meifeng (Brookhaven National Laboratory); LIN, Meifeng (Brookhaven National

Laboratory)

Session Classification: Plenary

Contribution ID: 19 Type: not specified

#### Further discussion/work

Wednesday, 15 January 2020 14:00 (3 hours)

TBD

**Session Classification:** Track-1 working session: tracking/TPC calibration

Welcome

Contribution ID: 20 Type: not specified

#### Welcome

Monday, 13 January 2020 09:00 (10 minutes)

**Presenter:** MORRISON, David (BNL)

Session Classification: Plenary

Contribution ID: 21 Type: not specified

#### Calorimeter calibration

Thursday, 16 January 2020 09:30 (30 minutes)

**Presenter:** FRANTZ, Justin (Ohio University)

Session Classification: Plenary

Contribution ID: 22 Type: not specified

## Study of nuclear effects in small collision systems connecting proton-proton and heavy-ion collisions

Tuesday, 14 January 2020 11:00 (1 hour)

BNL Nuclear Physics Seminar, Small Seminar Room @ Physics Building

The main purpose of relativistic heavy-ion collision experiments is to understand Quark-Gluon Plasma (QGP) which is very hot and dense QCD matters produced in heavy-ion collisions. Early results from RHIC such as jet quenching and elliptic flow are supported for the formation of the QGP. In order to fully understand the properties of the QGP, it is very important to understand initial conditions before the QGP formation. Proton(deuteron)-ion collision is a control experiment to explore this kind of effects from intrinsic nucleus so called cold-nuclear-matter (CNM) effects such as modification of parton distributions, energy loss, multiple scattering, and break-up of quarkonia states. Another striking results recently observed in small systems are long-range correlations which were believed as one of properties of the QGP. Now, the studies in small systems receives much more attention than that as a control experiment of heavy-ion collisions. I will introduce the interesting results in small collision systems as well as what we can learn from the expected measurements in the future.

**Presenter:** LIM, Sanghoon (University of Colorado Boulder)

Contribution ID: 23 Type: not specified

## **Computing plan**

Thursday, 16 January 2020 09:00 (30 minutes)

**Presenter:** SOLTZ, Ron (LLNL)

Session Classification: Plenary

Contribution ID: 24 Type: not specified

## **Group Photo**

Monday, 13 January 2020 10:30 (15 minutes)

Contribution ID: 25 Type: not specified

## **Tracking tasks**

Tuesday, 14 January 2020 09:00 (30 minutes)

Presenters: FRAWLEY, Anthony (Florida State University); ROLAND, Christof (MIT)

Session Classification: Plenary

Contribution ID: 26 Type: not specified

#### Lab tour: TPC and EMCal labs

Wednesday, 15 January 2020 09:30 (1 hour)

Lab tour: TPC and EMCal labs

**Presenters:** AZMOUN, Bob (Brookhaven National Laboratory); HAGGERTY, John (Brookhaven

National Laboratory)

Session Classification: Track-2 working session: topical groups

Contribution ID: 27 Type: not specified

#### Lab tour: TPC and EMCal labs

Thursday, 16 January 2020 13:00 (1 hour)

Lab tour: TPC and EMCal labs

We walk from conference room to Physics building labs after lunch

**Presenters:** AZMOUN, Bob (Brookhaven National Laboratory); MORRISON, David (BNL); HAGGERTY, John (Brookhaven National Laboratory); KUCZEWSKI, John (BNL); SAKAGUCHI, Takao (BNL)

Contribution ID: 28 Type: not specified

#### **Calibration lists**

Wednesday, 15 January 2020 14:00 (20 minutes)

Presenter: SAKAGUCHI, Takao (BNL)

Session Classification: Plenary

Contribution ID: 29 Type: not specified

#### **Current Status of HCal Calibrations Plans**

Thursday, 16 January 2020 13:30 (45 minutes)

**Presenter:** FRANTZ, Justin (Ohio University)

Session Classification: Track-2 working session: topical groups

Contribution ID: 30 Type: not specified

## Any Other Contributions to HCal Discussion

Thursday, 16 January 2020 14:15 (15 minutes)

Session Classification: Track-2 working session: topical groups

Contribution ID: 31 Type: not specified

#### **Calo Calibrations**

**Presenter:** FRANTZ, Justin (Ohio University)

Contribution ID: 32 Type: not specified

## **Jet Energy Scale Update**

Thursday, 16 January 2020 14:30 (30 minutes)

**Presenter:** TORALES - ACOSTA, Fernando

Session Classification: Track-2 working session: topical groups

Welcome

Contribution ID: 33 Type: not specified

#### Welcome

Friday, 17 January 2020 09:00 (20 minutes)

Presenters: MORRISON, David (BNL); ROLAND, Gunther (MIT)

Session Classification: IB Meeting

Contribution ID: 34 Type: **not specified** 

# Calorimeter response VS Geant4 versions/configuration

Friday, 17 January 2020 12:45 (10 minutes)

**Presenter:** VERKEST, Veronica (Wayne State University)

Session Classification: Plenary

Contribution ID: 35 Type: not specified

#### **KFParticle -> sPHENIX**

Friday, 17 January 2020 11:50 (10 minutes)

Presenters: DEAN, Cameron (LANL); CORRALES MORALES, Yasser (LANL); JI, Yuanjing (USTC/LBNL)

Session Classification: Plenary

Contribution ID: 36 Type: not specified

## Sampling fraction deep check with thin target

Friday, 17 January 2020 12:55 (10 minutes)

Presenters: CHEN, Mingqian (Lehigh University); CHEN, Mingqian (Lehigh University)

Session Classification: Plenary

Contribution ID: 37 Type: not specified

## **Tracking QA**

Friday, 17 January 2020 12:35 (10 minutes)

**Presenter:** TAYLOR, Molly (MIT)

Session Classification: Plenary

Contribution ID: 38 Type: not specified

## Workshop summary

Friday, 17 January 2020 11:30 (15 minutes)

Presenters: FRAWLEY, Anthony (Florida State University); PINKENBURG, Chris (BNL)

Session Classification: Plenary

Contribution ID: 39 Type: not specified

#### **MVTX** simulation

Friday, 17 January 2020 12:15 (10 minutes)

**Presenter:** CORRALES MORALES, Yasser (LANL)

Session Classification: Plenary

Contribution ID: 40 Type: not specified

## **Data Storage Format**

Friday, 17 January 2020 13:05 (10 minutes)

Primary author: PINKENBURG, Chris (BNL)

**Presenter:** PINKENBURG, Chris (BNL)

Session Classification: Plenary

Contribution ID: 41 Type: not specified

## tracking update

Friday, 17 January 2020 11:45 (5 minutes)

Presenters: FRAWLEY, Anthony (Florida State University); ROLAND, Christof (MIT)

Session Classification: Plenary

Contribution ID: 42 Type: not specified

#### calibration infrastructure discussion

Friday, 17 January 2020 13:15 (5 minutes)

Presenter: SAKAGUCHI, Takao (BNL)

Session Classification: Plenary

Contribution ID: 43 Type: not specified

## **ACTS** plan

Friday, 17 January 2020 12:00 (5 minutes)

**Presenter:** FRAWLEY, Anthony (Florida State University)

Session Classification: Plenary

Contribution ID: 44 Type: **not specified** 

#### **TPC** distoration

Friday, 17 January 2020 12:05 (10 minutes)

**Presenters:** PEREIRA DA COSTA, Hugo (Université Paris-Saclay (Fr)); CORLISS, Ross (SBU)

Session Classification: Plenary

Vertexing

Contribution ID: 45 Type: **not specified** 

## Vertexing

Friday, 17 January 2020 12:25 (10 minutes)

**Presenter:** LIM, Sanghoon (University of Colorado Boulder)

Session Classification: Plenary