

# **VIII FOOT Virtual Collaboration Meeting**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## General Discussions

*Friday, 12 June 2020 10:30 (1 hour)*

**Primary author:** PATERA, Vincenzo (ROMA1)

**Presenter:** PATERA, Vincenzo (ROMA1)

**Session Classification:** 12th morning session

Contribution ID: 2

Type: **not specified**

## General Remarks

*Wednesday, 10 June 2020 14:10 (20 minutes)*

**Presenter:** PATERA, Vincenzo (ROMA1)

**Session Classification:** Welcome

Contribution ID: 3

Type: **not specified**

## Welcome

*Wednesday, 10 June 2020 14:00 (10 minutes)*

**Primary author:** Dr CHRISTIAN, Finck (IPHC)

**Presenter:** Dr CHRISTIAN, Finck (IPHC)

**Session Classification:** Welcome

Contribution ID: 4

Type: **Detectors**

## **Status report on the calorimeter development**

*Thursday, 11 June 2020 12:00 (30 minutes)*

Status of the construction on the calorimeter, open issues and expected timeline

**Primary author:** CERELLO, Piergiorgio (INFN)

**Presenter:** CERELLO, Piergiorgio (INFN)

**Session Classification:** Detectors (2)

Contribution ID: 5

Type: **Detectors**

## Beam Monitor status

*Thursday, 11 June 2020 09:00 (30 minutes)*

Status of the Beam Monitor analysis results

**Primary author:** DONG, Yunsheng (MI)

**Presenter:** DONG, Yunsheng (MI)

**Session Classification:** Detectors (1)

Contribution ID: 6

Type: **Simulation**

## Update on FOOT Simulation using FLUKA

*Wednesday, 10 June 2020 15:30 (30 minutes)*

All about progresses and updates since the last Collaboration Meeting

**Primary authors:** BATTISTONI, Giuseppe (MI); MURARO, Silvia (Istituto Nazionale di Fisica Nucleare); VALLE, Serena Marta (INFN Milano); DONG, Yunsheng (MI)

**Presenter:** BATTISTONI, Giuseppe (MI)

**Session Classification:** Software

Contribution ID: 7

Type: **Data analysis**

## **Cross Section C-C C-H C-O at forward angles: updates**

*Thursday, 11 June 2020 15:30 (30 minutes)*

Updates

**Primary author:** MATTEI, Ilaria (INFN)

**Presenter:** MATTEI, Ilaria (INFN)

**Session Classification:** Analysis (i)



Contribution ID: 8

Type: **Data analysis**

## Data taking plans at HIT

*Thursday, 11 June 2020 17:30 (30 minutes)*

Discussion on the proposal to be submitted for taking data at HIT

**Primary authors:** CERELLO, Piergiorgio (INFN); SARTI, Alessio (LNF)

**Presenter:** CERELLO, Piergiorgio (INFN)

**Session Classification:** Analysis (ii)

Contribution ID: 9

Type: **Detectors**

## **Temperature monitor results and data analysis of the CNAO test beam**

*Thursday, 11 June 2020 14:30 (30 minutes)*

The results of the last test beam performed at CNAO in February and an offline method to correct the temperature fluctuation will be presented

**Primary author:** Mr SCAVARDA, Lorenzo (INFN, Sezione di Torino)

**Presenter:** Mr SCAVARDA, Lorenzo (INFN, Sezione di Torino)

**Session Classification:** Analysis (i)

Contribution ID: **10**

Type: **Data analysis**

## **Cross section performances**

*Thursday, 11 June 2020 16:00 (30 minutes)*

Cross section reconstruction and systematic study depending on p, ToF, Ekin.

**Primary author:** COLOMBI, Sofia (University of Trento)

**Presenter:** COLOMBI, Sofia (University of Trento)

**Session Classification:** Analysis (i)

Contribution ID: 11

Type: **Software**

## **Global reconstruction with Genfit framework**

*Wednesday, 10 June 2020 17:00 (30 minutes)*

Global reconstruction with Genfit framework, 20 minutes talk

**Primary author:** Mr RIDOLFI, Riccardo (BO)

**Presenter:** Mr RIDOLFI, Riccardo (BO)

**Session Classification:** Software

Contribution ID: 12

Type: **Data analysis**

## Charge measurement in Section 2 of GSI 2019 data taking Oxy@200 MeV on C2H4

*Thursday, 11 June 2020 18:00 (30 minutes)*

The section 2 of the emulsion spectrometer is dedicated to the charge measurement. We will show the results for the exposure  $^{16}\text{O}@200$  MeV on  $\text{C}_2\text{H}_4$ , done at GSI in 2019.

For the evaluation of differential cross section, the association of tracks in S2 to vertices is crucial. A multivariate approach has been investigated to select vertices coming from the beam and reject those due to random tracks combinations. Results will be shown.

**Primary author:** GALATI, Giuliana (NA)

**Co-authors:** ALEXANDROV, Andrey (NA); DI CRESCENZO, Antonia (NA); DE LELLIS, Giovanni (NA); GENTILE, Valerio (GSSI); IULIANO, Antonio (NA); LAURIA, Adele (NA); MONTESI, Maria Cristina (NA); PASTORE, Alessandra (BA); TIOUKOV, Valeri (NA)

**Presenter:** GALATI, Giuliana (NA)

**Session Classification:** Analysis (ii)

Contribution ID: 14

Type: **Detectors**

## Update on the Start Counter

*Thursday, 11 June 2020 09:30 (30 minutes)*

The Start Counter updated performance measured at GSI in february will be summarized. (~15minutes)

**Primary author:** TRAINI, Giacomo (ROMA1)

**Presenter:** TRAINI, Giacomo (ROMA1)

**Session Classification:** Detectors (1)

Contribution ID: 15

Type: **Software**

## **Global reconstruction with TOE**

*Wednesday, 10 June 2020 17:30 (30 minutes)*

Global reconstruction with TOE

**Primary author:** SÉCHER, Alexandre (IPHC-CNRS)

**Presenter:** SÉCHER, Alexandre (IPHC-CNRS)

**Session Classification:** Software

Contribution ID: 16

Type: **Software**

## Software Status Report

*Wednesday, 10 June 2020 15:00 (30 minutes)*

**Primary author:** Dr FINCK, Christian (IPHC)

**Co-author:** SARTI, Alessio (LNF)

**Presenter:** Dr FINCK, Christian (IPHC)

**Session Classification:** Software



Contribution ID: 17

Type: **not specified**

## Editorial Board Report

*Wednesday, 10 June 2020 14:30 (30 minutes)*

**Primary authors:** LA TESSA, Chiara (TIFP); Dr VANSTALLE, Marie (IPHC-CNRS); VILLA, Mauro (BO)

**Presenter:** VILLA, Mauro (BO)

**Session Classification:** Welcome

Contribution ID: **18**

Type: **Detectors**

## **VTX-IT Status Report**

*Thursday, 11 June 2020 10:00 (30 minutes)*

**Presenter:** Mr SPIRITI, Eleuterio (LNF)

**Session Classification:** Detectors (1)

Contribution ID: **19**

Type: **Detectors**

## **MSD Status Report**

*Thursday, 11 June 2020 11:00 (30 minutes)*

**Presenter:** SERVOLI, Leonello (PG)

**Session Classification:** Detectors (2)

Contribution ID: **20**

Type: **Detectors**

## DAQ Status Report

*Wednesday, 10 June 2020 18:00 (30 minutes)*

**Presenter:** BIONDI, Silvia (BO)

**Session Classification:** Detectors (1)

Contribution ID: 22

Type: **Data analysis**

## Experimental area at CNAO

*Friday, 12 June 2020 09:30 (30 minutes)*

**Presenter:** PULLIA, Marco (CNAO)

**Session Classification:** 12th morning session

Contribution ID: 23

Type: **Detectors**

## **Low Beam Intensity Monitoring at CNAO**

*Friday, 12 June 2020 10:00 (30 minutes)*

**Primary author:** TOPPI, Marco (LNF)

**Presenter:** TOPPI, Marco (LNF)

**Session Classification:** 12th morning session

Contribution ID: 24

Type: **Data analysis**

## Physics Status Report

*Thursday, 11 June 2020 18:40 (30 minutes)*

**Primary author:** SPIGHI, Roberto (BO)

**Presenter:** SPIGHI, Roberto (BO)

**Session Classification:** Analysis (ii)

Contribution ID: 25

Type: **Data analysis**

## Neutrons @ FOOT

*Thursday, 11 June 2020 17:00 (30 minutes)*

In this talk I will present the study on the possibility to detect neutrons with the current experimental setup. After a brief introduction on neutron detection and detectors, I will present preliminary results obtained from the simulated data of a  $^{16}\text{O}$  beam with energy of 200 MeV/u on  $\text{C}_2\text{H}_4$ . In particular I will show the potential use of the calorimeter to derive some information on high energy neutrons.

**Primary author:** MASSIMI, Cristian (BO)

**Presenter:** MASSIMI, Cristian (BO)

**Session Classification:** Analysis (ii)



Contribution ID: 26

Type: **Detectors**

## Update on the status of the Magnet bid

*Thursday, 11 June 2020 12:30 (10 minutes)*

30 min

**Primary author:** MOGGI, Andrea (PI)

**Presenter:** MOGGI, Andrea (PI)

**Session Classification:** Detectors (2)

Contribution ID: 27

Type: **Detectors**

## Status Report of the TOFWAL

*Thursday, 11 June 2020 11:30 (30 minutes)*

30 min

**Primary author:** MORROCCHI, MATTEO (PI)

**Presenter:** MORROCCHI, MATTEO (PI)

**Session Classification:** Detectors (2)

Contribution ID: **28**

Type: **Data analysis**

## **Data analysis GSI-CNAO**

*Thursday, 11 June 2020 14:00 (30 minutes)*

30min

**Primary author:** KRAAN, Aafke Christine (PI)

**Presenter:** KRAAN, Aafke Christine (PI)

**Session Classification:** Analysis (i)

Contribution ID: 29

Type: **Software**

## Z identification with TOF

*Wednesday, 10 June 2020 16:30 (30 minutes)*

30 min

**Primary authors:** TOPPI, Marco (LNF); MURTAS, Federica (Istituto Nazionale di Fisica Nucleare)

**Presenter:** MURTAS, Federica (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Software

Contribution ID: 30

Type: **Data analysis**

## **Tracks and Vertices Reconstruction of GSI 2019 data taking (Oxy@200 MeV on C2H4)**

*Thursday, 11 June 2020 15:00 (30 minutes)*

Updates on tracks and vertices reconstruction

**Primary author:** GALATI, Giuliana (NA)

**Co-authors:** ALEXANDROV, Andrey (NA); DI CRESCENZO, Antonia (NA); DE LELLIS, Giovanni (NA); GENTILE, Valerio (GSSI); IULIANO, Antonio (NA); LAURIA, Adele (NA); MONTESI, Maria Cristina (NA); PASTORE, Alessandra (BA); TIOUKOV, Valeri (NA)

**Presenter:** GALATI, Giuliana (NA)

**Session Classification:** Analysis (i)

Contribution ID: 31

Type: **Data analysis**

## Testing NIT emulsion films

*Thursday, 11 June 2020 18:30 (10 minutes)*

30

**Primary author:** DE LELLIS, Giovanni (NA)

**Presenter:** DE LELLIS, Giovanni (NA)

**Session Classification:** Analysis (ii)