

IX FOOT Collaboration Meeting

Wednesday, 9 December 2020 - Friday, 11 December 2020

Book of Abstracts

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Welcome

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General Remarks

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Report on Beam Monitor

Corresponding Author: yunsheng.dong@mi.infn.it**Detectors / 26**

Report on VTX - IT

Author: Eleuterio Spiriti¹¹ *LNF***Corresponding Authors:** eleuterio.spiriti@lnf.infn.it, cfinck@ires.in2p3.fr**Detectors / 27**

Report on MSD

Corresponding Author: leonello.servoli@pg.infn.it**Detectors / 8**

Status Report of the TOF-WALL detector

Author: MATTEO MORROCCHI¹¹ *PI*

Corresponding Author: matteo.morrocchi@pi.infn.it

Status Report of the TOF-WALL detector and timeline for future developments

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Characterization of the SiPMs of the TOF-WALL Detector

Author: Marco Montefiori¹

¹ INFN Sezione di Pisa

Corresponding Author: marco.montefiori94@gmail.com

Characterization of the SiPMs of the TOF-WALL Detector and study of the light attenuation in the scintillator bar.

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Magnet BID status

Corresponding Author: andrea.moggi@pi.infn.it

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DAQ status

Corresponding Author: biondisi@bo.infn.it

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Report on trigger and wavedaq

Corresponding Author: luca.galli@pi.infn.it

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Report from Run coordinators

Corresponding Author: giacomo.traini@roma1.infn.it

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Neutron detection at CNAO

Corresponding Author: michela.marafini@roma1.infn.it

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Simulation of the optical transport in the Calorimeter

Author: Esther Ciarrocchi¹

¹ INFN Pisa

Corresponding Author: esther.ciarrocchi@pi.infn.it

The simulation workflow developed in Geant4 is described, and the application to the FOOT calorimeter is presented.

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Data analysis of the CNAO testbeam and study of the optical photons absorption in the BGO crystals

Authors: Lorenzo Scavarda¹; Stefano Argiro^{'1}; Nazar Bartosik¹; Francesca Cavanna²; Piergiorgio Cerello¹; Luciano Ramello¹

¹ TO

² GE

Corresponding Authors: luciano.ramello@to.infn.it, piergiorgio.cerello@to.infn.it, fcavanna@ge.infn.it, lorenzo.scavarda@to.infn.it, nazar.bartosik@to.infn.it, stefano.argiro@to.infn.it

My talk will foresee:

- data analysis of the CNAO testbeam performed in August
- study of the optical photons absorption in the BGO crystals trough MC simulations

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Calorimeter temperature monitoring system

Author: Luciano Ramello¹

Co-author: Piergiorgio Cerello¹

¹ TO

Corresponding Authors: piergiorgio.cerello@to.infn.it, luciano.ramello@to.infn.it

A scheme for the readout of the NTC temperature sensors present on the Calotimeter SiPM tiles will be presented

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Calorimeter Status Report

Corresponding Authors: piergiorgio.cerello@to.infn.it, cerello@to.infn.it

Review of the status of the development / construction

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Cluster reconstruction inside the calorimeter with Shoe

Authors: Francesca Cavanna¹; Lorenzo Scavarda²¹ GE² TO**Corresponding Authors:** lorenzo.scavarda@to.infn.it, fcavanna@ge.infn.it

Short summary of the work done so far to test the algorithm of cluster reconstruction inside the calorimeter

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Analysis of the GSI data acquired in 2019 with the emulsion chamber

Corresponding Author: giuliana.galati@na.infn.it**Analysis / 17**

Z identification with 2019 data acquired at CNAO and GSI

Corresponding Authors: r.zarrella@studenti.unipi.it, zarrella@bo.infn.it**Analysis / 18**

Update on the charge cross section measurements with 2019 data acquired at CNAO and GSI

Corresponding Author: marco.toppi@lnf.infn.it**Analysis / 23**

Statistical considerations for the next data taking at CNAO

Corresponding Author: aafke.kraan@pi.infn.it

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Updates on neutron data in the literature and possible setup for the CNAO and GSI test

Author: Cristian Massimi¹

¹ BO

Corresponding Author: cristian.massimi@bo.infn.it

I am going to present an overview of the neutron data in the literature, and propose a possible ancillary setup - consisting of an array of neutron detectors - to be used in the forthcoming tests at CNAO and GSI

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Update on the Cross Section of ^{12}C fragmentation

Corresponding Author: ilaria.mattei@mi.infn.it

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Software status and perspectives

Corresponding Authors: cfinck@ires.in2p3.fr, alessio.sarti@lnf.infn.it

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CNAO 2020 simulation and status of FLUKA development

Corresponding Author: giuseppe.battistoni@mi.infn.it

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Editorial Board report

Corresponding Author: chiara.latessa@tifpa.infn.it

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FOOT PRIN status

Author: Vincenzo Patera¹

¹ ROMA1

(20 min presentation + 20 min general discussion)

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CNAO 2020 simulation

Corresponding Author: giuseppe.battistoni@mi.infn.it

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FOOT software status and perspectives

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Report by the run coordinators

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