

Radiation effects in the LHC experiments and impact on operation and performance

Report of Contributions

Contribution ID: 1

Type: **not specified**

Registration

Monday 11 February 2019 08:30 (30 minutes)

Contribution ID: 2

Type: **not specified**

Workshop welcome and goals

Monday 11 February 2019 09:00 (15 minutes)

Presenter: DAWSON, Ian (University of Sheffield (GB))

Contribution ID: **3**

Type: **not specified**

Lunch break

Monday 11 February 2019 12:30 (1h 30m)

Contribution ID: 4

Type: **not specified**

Lunch break

Tuesday 12 February 2019 12:35 (1h 25m)

Contribution ID: 5

Type: **not specified**

Introduction

Tuesday 12 February 2019 09:00 (10 minutes)

Presenter: DAWSON, Ian (University of Sheffield (GB))

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 6

Type: **not specified**

Radiation damage simulation and modelling in FLUKA

Tuesday 12 February 2019 09:10 (20 minutes)

Presenter: VLACHOUDIS, Vasilis (CERN)

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 7

Type: **not specified**

Radiation background simulation capabilities of Geant4

Tuesday 12 February 2019 09:30 (20 minutes)

Presenter: Prof. IVANTCHENKO, Vladimir (CERN)

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 8

Type: **not specified**

Event generators for simulating radiation backgrounds

Tuesday 12 February 2019 09:50 (20 minutes)

Presenter: KAR, Deepak (University of the Witwatersrand (ZA))

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 9

Type: **not specified**

Coffee break

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: **10**

Type: **not specified**

ATLAS simulations, predictions, comparison with data

Tuesday 12 February 2019 11:00 (20 minutes)

Presenter: MENKE, Sven (Max-Planck-Institut für Physik (DE))

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 11

Type: **not specified**

CMS simulations, predictions, comparison with data

Tuesday 12 February 2019 11:20 (20 minutes)

Presenter: MALLOWS, Sophie (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 12

Type: **not specified**

LHCb simulations, predictions, comparison with data

Tuesday 12 February 2019 11:40 (20 minutes)

Presenters: MUCHA, Agnieszka (UST, FPACS, CERN); OBLAKOWSKA-MUCHA, Agnieszka (AGH University of Science and Technology (PL))

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 13

Type: **not specified**

Discussion

Presenter: ALL

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 14

Type: **not specified**

Silicon radiation damage at the LHC experiments

Monday 11 February 2019 09:15 (30 minutes)

Presenter: SONNEVELD, Jory (Hamburg University (DE))

Session Classification: Sensor measurements

Contribution ID: 15

Type: **not specified**

CMS pixel radiation damage measurements

Monday 11 February 2019 09:45 (20 minutes)

Presenter: FEINDT, Finn (Hamburg University (DE))

Session Classification: Sensor measurements

Contribution ID: 16

Type: **not specified**

CMS strip radiation damage measurements

Monday 11 February 2019 10:25 (20 minutes)

Presenter: AGRAM, Jean-Laurent (IPHC Strasbourg - Univ. de Haute-Alsace (FR))

Session Classification: Sensor measurements

Contribution ID: 17

Type: **not specified**

Silicon Pixel Sensor Simulation in the CMS Monte Carlo Framework

Monday 11 February 2019 14:45 (20 minutes)

Presenter: MANTILLA SUAREZ, Cristina Ana (Johns Hopkins University (US))

Session Classification: Sensor simulation

Contribution ID: **18**

Type: **not specified**

Overview

Monday 11 February 2019 14:10 (35 minutes)

Presenter: BENOIT, Mathieu (UNIGE)

Session Classification: Sensor simulation

Contribution ID: **19**

Type: **not specified**

Introduction

Monday 11 February 2019 14:00 (10 minutes)

Session Classification: Sensor simulation

Contribution ID: 20

Type: **not specified**

Recent results of the RD50 Collaboration

Monday 11 February 2019 11:50 (20 minutes)

Presenter: BASELGA, Marta (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Sensor measurements

Contribution ID: 21

Type: **not specified**

Leakage current measurements with the ATLAS pixel detector

Monday 11 February 2019 10:05 (20 minutes)

Presenter: GRUMMER, Aidan (University of New Mexico (US))

Session Classification: Sensor measurements

Contribution ID: 22

Type: **not specified**

Pixel Radiation Damage Measurements with ATLAS

Monday 11 February 2019 15:05 (20 minutes)

Presenter: SABATINI, Paolo (Georg August Universitaet Goettingen (DE))

Session Classification: Sensor simulation

Contribution ID: 23

Type: **not specified**

On the uncertainties of silicon hardness factors

Tuesday 12 February 2019 10:10 (25 minutes)

Presenter: HUHTINEN, Mika (CERN)

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 24

Type: **not specified**

Sensor measurements with the ATLAS SCT

Monday 11 February 2019 11:10 (20 minutes)

Presenter: MOCHIZUKI, Kazuya (Universite de Montreal (CA))

Session Classification: Sensor measurements

Contribution ID: 25

Type: **not specified**

Lorentz angle measurements and simulations in ATLAS

Monday 11 February 2019 15:50 (20 minutes)

Presenter: LLORENTE MERINO, Javier (Chinese Academy of Sciences (CN))

Session Classification: Sensor simulation

Contribution ID: 26

Type: **not specified**

Status and Plans for ATLAS Radiation Damage Simulation

Monday 11 February 2019 16:10 (20 minutes)

Presenter: WANG, Alex Zeng (University of Wisconsin Madison (US))

Session Classification: Sensor simulation

Contribution ID: 27

Type: **not specified**

Silicon Strip Sensor Simulation in the CMS Monte Carlo Framework

Monday 11 February 2019 16:30 (20 minutes)

Presenter: CHABERT, Eric (Centre National de la Recherche Scientifique (FR))

Session Classification: Sensor simulation

Contribution ID: 28

Type: **not specified**

Introduction

Tuesday 12 February 2019 14:00 (10 minutes)

Presenter: BUTZ, Erik (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Electronics/Optoelectronics

Contribution ID: 29

Type: **not specified**

Simulation of SEU/SET effects in the DICE latches by AFTU tool

Tuesday 12 February 2019 14:10 (15 minutes)

Presenter: PALOMO PINTO, Francisco Rogelio (Universidad de Sevilla (ES))

Session Classification: Electronics/Optoelectronics

Contribution ID: **30**

Type: **not specified**

SEU/SET results in ATLAS IBL FE-I4-B

Tuesday 12 February 2019 14:25 (30 minutes)

Presenter: BINDI, Marcello (Georg August Universitaet Goettingen (DE))

Session Classification: Electronics/Optoelectronics

Contribution ID: 31

Type: **not specified**

Evolution of low voltage currents in ATLAS IBL FE-I4 pixels

by video

Presenter: DICKINSON, Jennet Elizabeth (Lawrence Berkeley National Lab. (US))

Session Classification: Electronics/Optoelectronics

Contribution ID: 32

Type: **not specified**

SEU and LV currents in CMS pixels

Tuesday 12 February 2019 15:35 (20 minutes)

Presenter: PADEKEN, Klaas (Vanderbilt University (US))

Session Classification: Electronics/Optoelectronics

Contribution ID: 33

Type: **not specified**

Irradiation results from ATLAS SCT opto-boards

Tuesday 12 February 2019 15:55 (20 minutes)

Presenter: POWNALL, Gavin (University of Oxford (GB), DESY (DE))

Session Classification: Electronics/Optoelectronics

Contribution ID: 34

Type: **not specified**

Radiation effects in the CMS strip tracker readout electronics

Tuesday 12 February 2019 16:15 (20 minutes)

Presenter: GEROSA, Raffaele Angelo (Univ. of California San Diego (US))

Session Classification: Electronics/Optoelectronics

Contribution ID: 35

Type: **not specified**

LHCb electronics irradiation experience

TBC

Session Classification: Electronics/Optoelectronics

Contribution ID: **36**

Type: **not specified**

Discussions

Tuesday 12 February 2019 16:35 (40 minutes)

Session Classification: Electronics/Optoelectronics

Contribution ID: 37

Type: **not specified**

ALICE simulations, predictions, comparisons with data

Tuesday 12 February 2019 12:00 (20 minutes)

Presenter: DI MAURO, Antonello (CERN)

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: **38**

Type: **not specified**

Discussion

Tuesday 12 February 2019 12:20 (15 minutes)

Presenter: ALL

Session Classification: Radiation Background Simulation and Monitoring

Contribution ID: 39

Type: **not specified**

Radiation Damage and Detector Performance of the LHCb VELO in Run 1 and 2

Presenter: OBLAKOWSKA-MUCHA, Agnieszka (AGH University of Science and Technology (PL))

Contribution ID: 40

Type: **not specified**

Radiation effects in the LHCb VELO Run 1+2

Monday 11 February 2019 11:30 (20 minutes)

Presenter: SARPIS, Gediminas (University of Manchester (GB))

Session Classification: Sensor measurements

Contribution ID: 41

Type: **not specified**

LHCb Radiation damage simulations and comparison with data

Presenter: OBLAKOWSKA-MUCHA, Agnieszka (AGH University of Science and Technology (PL))

Session Classification: Sensor simulation

Contribution ID: 42

Type: **not specified**

Discussion

Monday 11 February 2019 12:10 (20 minutes)

Session Classification: Sensor measurements

Contribution ID: 43

Type: **not specified**

Discussion

Monday 11 February 2019 16:50 (25 minutes)

Session Classification: Sensor simulation

Contribution ID: 44

Type: **not specified**

Discussions

Tuesday 12 February 2019 14:55 (15 minutes)

Session Classification: Electronics/Optoelectronics