

**CERN BE-HSSIP
Post-Internship Event**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction to the meeting

Welcome

Introduction to the meeting

Presenters: VANHOOLANDT, Cédric (UNamur); GROOTAERD, Jean-Pierre (UGent)

Session Classification: Plenary session : Scientific

Contribution ID: 2

Type: **not specified**

UNamur Physics Department

Department of Physics at UNamur is the host of the event.

Physics is a science for the curious.

Its director introduces the research of the dept which is focused on the study of materials, radiations and their interactions and is developed within six laboratories.

<https://www.unamur.be/en/sci/physics/>

Presenter: HOUSSIAU, Laurent (UNamur)

Session Classification: Plenary session : Scientific

Contribution ID: 3

Type: **not specified**

conf 1

ajouter une description 1

Session Classification: Plenary session : Scientific

Contribution ID: 4

Type: **not specified**

conf 2

ajouter une description 2

Session Classification: Plenary session : Scientific

Contribution ID: 5

Type: **not specified**

conf 3

ajouter une description 3

Session Classification: Plenary session : Scientific

Contribution ID: 6

Type: **not specified**

Accelerator control

Saturday, March 26, 2022 4:30 PM (10 minutes)

With thanks to Ron Suykerbuyk

Presenters: TELLO SANTACRUZ, Esteban; JACOBS, William

Session Classification: Plenary session

Contribution ID: 7

Type: **not specified**

Analyzing massive datasets in the cloud

Saturday, March 26, 2022 4:40 PM (10 minutes)

With thanks to Spyros Trigazis

Presenters: LEDEGANCK, Laurens; DEWULF, Xander

Session Classification: Plenary session

Contribution ID: 8

Type: **not specified**

Muon detection

Saturday, March 26, 2022 4:50 PM (10 minutes)

With thanks to Markus Joos

Presenters: DE LEENER, Alexia; KLINKENBERG, Anna

Session Classification: Plenary session

Contribution ID: 9

Type: **not specified**

CMS Data Analysis

Saturday, March 26, 2022 5:00 PM (10 minutes)

With thanks to Pieter Everaerts and Filip Moortgat

Presenters: BUTS, Faye; LAUWERS, Kaat

Session Classification: Plenary session

Contribution ID: **10**

Type: **not specified**

Internet of Things and data visualization in augmented reality

Saturday, March 26, 2022 5:10 PM (10 minutes)

With thanks to Brice Copy and Thomas Oulevey

Presenters: ZHU, Emma; VITORAC, Petar; VIERLINCK, Robin

Session Classification: Plenary session

Contribution ID: **11**

Type: **not specified**

ISOLDE : DAQ development and alpha/beta decay

Saturday, March 26, 2022 5:20 PM (10 minutes)

CRIS Team : with thanks to Sarina Geldhof

WISArD Team : with thanks to Dinko Atanasov

Presenters: BOSSENS, Elke; THOMPSON, Holy; CAMPS, Tim; HELSEN, Wout

Session Classification: Plenary session

Contribution ID: 12

Type: **not specified**

Artificial intelligence in accelerators

Saturday, March 26, 2022 5:30 PM (10 minutes)

With thanks to Frederik Van Der Veken and Wietse Van Goethem

Presenters: LOWYCK, Amy; BOGAERT, Michiel; AKBARI, Runa

Session Classification: Plenary session

Contribution ID: **13**

Type: **not specified**

Safety at CERN

Saturday, March 26, 2022 5:40 PM (10 minutes)

With thanks to André Dziewa and Pierre Carbonez

Presenters: SCHMIT, Elena; DEMY, Pierre

Session Classification: Plenary session

Contribution ID: 14

Type: **not specified**

Enhancing CERN's Educational Resources Database to test, evaluate and design science workshops

Saturday, March 26, 2022 5:50 PM (10 minutes)

With thanks to Patrick Thill and Anja Kranjc Horvat

Presenters: HEYVAERT, Julie; NIJS, Seppe

Session Classification: Plenary session

Contribution ID: 15

Type: **not specified**

Audiovisual production

Saturday, March 26, 2022 6:00 PM (10 minutes)

With thanks to Paola Catapano

Presenters: PORTIER, Margot; LIBERT, Satya

Session Classification: Plenary session

Contribution ID: 17

Type: **not specified**

Closing

Saturday, March 26, 2022 6:10 PM (10 minutes)

Presenters: VANHOOLANDT, Cédric (UNamur); GROOTAERD, Jean-Pierre (UGent); RYCKBOSCH, Dirk (UGent); PLUMAT, Jim (UNamur)

Session Classification: Plenary session

Contribution ID: **18**

Type: **not specified**

Introduction to the meeting

Saturday, March 26, 2022 2:00 PM (10 minutes)

Welcome and introduction

Presenters: VANHOOLANDT, Cédric (UNamur); GROOTAERD, Jean-Pierre (UGent)

Session Classification: Plenary session

Contribution ID: **19**

Type: **not specified**

The Physics Department at UNamur

Saturday, March 26, 2022 2:25 PM (10 minutes)

The research of the Department of Physics at UNamur (which is the host of this event) is introduced by its director.

It is focused on the study of materials, radiations and their interactions and is developed within six laboratories.

<https://www.unamur.be/en/sci/physics>

Presenter: Prof. HOUSSIAU, Laurent (UNamur)

Session Classification: Plenary session

Contribution ID: 20

Type: **not specified**

Brilliant Colours of Life

Saturday, March 26, 2022 2:35 PM (25 minutes)

Photonic structures found in natural organisms are very sophisticated materials, developed during millions of years through natural evolution. When they interact with light, they give rise to astonishing visual effects. Beetles' elytra as well as butterflies' wings are among the most striking examples. Investigating these natural colours allows us to understand these optical behaviours, to elucidate the related biological functions and to draw inspiration for the design and development of novel photonic materials through a bioinspiration approach.

Presenter: Dr MOUCHET, Sébastien (UNamur)**Session Classification:** Plenary session

Contribution ID: 21

Type: **not specified**

JWST : a new exploration of the cosmos

Saturday, March 26, 2022 3:00 PM (25 minutes)

The James Webb Space Telescope (JWST, or Webb) is the new flagship mission from NASA and ESA. Webb was launched on December 25 2021 and is currently being deployed and commissioned in space. It will be orders of magnitude more powerful than previous missions with infrared “eyes”. Webb will therefore push the boundaries of human knowledge even further, to the formation of the first galaxies and the horizons of other worlds. This talk will summarize the JWST mission and its instruments, including Belgian’s role in them, as well as some of the exciting science that Webb will do.

Presenter: Prof. VAN DISHOECK, Ewine (University of Leiden)

Session Classification: Plenary session

Contribution ID: 22

Type: **not specified**

Climate change: urgent action is needed!

Saturday, March 26, 2022 3:25 PM (25 minutes)

Today, no doubt is left about what causes the climate change we're all experiencing. We'll show three evidences: (1) climate is changing at a very fast rate, (2) climate change is due primarily to the increase of carbon dioxide concentration in the atmosphere and (3) the increase of carbon dioxide is solely due to the combustion of fossil fuels (coal, oil and natural gas), which still constitute the main source of energy for humanity. The only way to mitigate climate change and limit the warming to the 1.5°C-2.0°C range is to reduce drastically the use of these fuels in the next decade and aim at a zero-carbon civilization around 2050. The challenge is enormous, but this is what it takes to save our planet!

Presenter: Prof. HOUSSIAU, Laurent (UNamur)

Session Classification: Plenary session

Contribution ID: **23**

Type: **not specified**

Back to BE-HSSIP

Saturday, March 26, 2022 4:20 PM (10 minutes)

See also

24 Belgian students to the conquest of CERN (EN/NL/FR) written by S. Libert and M. Portier

Presenters: BRIARD, François (CERN); BOSELLI, Margherita (CERN)

Session Classification: Plenary session

Contribution ID: 24

Type: **not specified**

Talk of the Minister of Education

Saturday, March 26, 2022 2:10 PM (10 minutes)

Presenter: Mrs DÉSIR, Caroline (FWB)

Session Classification: Plenary session

Contribution ID: 25

Type: **not specified**

Talk of the UNamur first Vice-Rector

Saturday, March 26, 2022 2:20 PM (5 minutes)

Presenter: MICHIELS, Carine (Universite de Namur)

Session Classification: Plenary session

Contribution ID: 26

Type: **not specified**

Talk of the Representative of EU Commissioner for Innovation, Research, Culture, Education and Youth

Saturday, March 26, 2022 4:10 PM (10 minutes)

Mariya Gabriel is the Commissioner for Innovation, Research, Culture, Education and Youth

Presenter: MORAIS PIRES, Carlos (European Commission)

Session Classification: Plenary session