

# WIFAI 2023

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Workshop Italiano sulla Fisica ad Alta Intensità

Roma 8-10 Novembre 2023

Aula Magna Adalberto Libera – ex Mattatoio

Via Aldo Manuzio 68L



# Report of Contributions

Contribution ID: 1

Type: **not specified**

## Introduction

*Thursday, 9 November 2023 14:30 (10 minutes)*

**Presenters:** TARANTINO, Cecilia (Istituto Nazionale di Fisica Nucleare); BRIZIOLI, Francesco (Istituto Nazionale di Fisica Nucleare); CANDELISE, Vieri (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 2

Type: **not specified**

## **B rare decays: theory overview**

*Thursday, 9 November 2023 14:40 (25 minutes)*

**Presenter:** Dr FEDELE, Marco (KIT)

**Session Classification:** Rare Decays

Contribution ID: 3

Type: **not specified**

## **Status and prospects of rare decays at LHCb**

*Thursday, 9 November 2023 15:05 (25 minutes)*

**Presenter:** FONTANA, Marianna (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 4

Type: **not specified**

## **Status and prospects of rare decays at Belle-II**

*Thursday, 9 November 2023 15:30 (25 minutes)*

**Presenter:** MANONI, Elisa (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 5

Type: **not specified**

## **Status and prospects of rare decays at BES-III**

*Thursday, 9 November 2023 15:55 (25 minutes)*

**Presenter:** MEZZADRI, Giulio (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 6

Type: **not specified**

## **Kaon rare decays: theory overview**

*Thursday, 9 November 2023 16:50 (25 minutes)*

**Presenter:** NESHATPOUR, Siavash (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 7

Type: **not specified**

## **Status and prospects of rare decays at NA62/HIKE**

*Thursday, 9 November 2023 17:15 (25 minutes)*

**Presenter:** MARTELLOTTI, Silvia (INFN - LNF)

**Session Classification:** Rare Decays



Contribution ID: 8

Type: **not specified**

## **Status and prospects of rare decays at ATLAS and CMS**

*Thursday, 9 November 2023 17:40 (25 minutes)*

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

**Session Classification:** Rare Decays

Contribution ID: 9

Type: **not specified**

## Discussion

*Thursday, 9 November 2023 18:05 (25 minutes)*

**Presenters:** TARANTINO, Cecilia (Istituto Nazionale di Fisica Nucleare); BRIZIOLI, Francesco (Istituto Nazionale di Fisica Nucleare); CANDELISE, Vieri (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Rare Decays

Contribution ID: 10

Type: **not specified**

# Overview of time-integrated $CP$ violation in beauty-hadron decays

*Wednesday, 8 November 2023 09:15 (25 minutes)*

**Presenter:** FAZZINI, Davide (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** CKM and CP violation

Contribution ID: 11

Type: **not specified**

## Overview of time-dependent $CP$ violation in $B$ meson decays

*Wednesday, 8 November 2023 09:40 (25 minutes)*

**Presenter:** KANDRA, Jakub (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** CKM and CP violation

Contribution ID: 12

Type: **not specified**

## Overview of CKM metrology from semileptonic decays

*Wednesday, 8 November 2023 10:05 (25 minutes)*

**Presenter:** MONETA, Stefano (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** CKM and CP violation

Contribution ID: 13

Type: **not specified**

## Overview of $CP$ violation in charm-hadron decays

*Wednesday, 8 November 2023 10:30 (25 minutes)*

**Presenter:** BETTI, Federico

**Session Classification:** CKM and CP violation

Contribution ID: 14

Type: **not specified**

# Experimental overview of CKM metrology from kaon physics

*Wednesday, 8 November 2023 11:25 (25 minutes)*

**Presenter:** SWALLOW, Joel Christopher

**Session Classification:** CKM and CP violation

Contribution ID: 15

Type: **not specified**

## **Overview and theoretical prospects for CKM matrix and $CP$ violation**

*Wednesday, 8 November 2023 11:50 (35 minutes)*

**Presenter:** VALLI, Mauro (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** CKM and CP violation



Contribution ID: 16

Type: **not specified**

## **Prospects from future experiment: physics reach and experimental challenges**

*Wednesday, 8 November 2023 12:25 (30 minutes)*

**Presenter:** NERI, Nicola (University and INFN Milano)

**Session Classification:** CKM and CP violation

Contribution ID: 17

Type: **not specified**

## Introduction and open points

*Wednesday, 8 November 2023 09:10 (5 minutes)*

**Presenters:** CASAROSA, Giulia (Istituto Nazionale di Fisica Nucleare); FINOCCHIARO, Giuseppe (INFN - Laboratori Nazionali di Frascati); PERAZZINI, Stefano (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** CKM and CP violation

Contribution ID: **18**

Type: **not specified**

## Introduction

*Wednesday, 8 November 2023 14:10 (10 minutes)*

**Presenters:** VECCHI, Stefania (Istituto Nazionale di Fisica Nucleare); SPATARO, Stefano (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Spectroscopy

Contribution ID: 19

Type: **not specified**

## Theory: XYZ Exotics Theory

*Wednesday, 8 November 2023 14:20 (40 minutes)*

**Presenters:** BRAMBILLA, Nora (TUM); BRAMBILLA, Nora

**Session Classification:** Spectroscopy

Contribution ID: 20

Type: **not specified**

## **Spectroscopy at BESIII: A Selected XYZ Review**

*Wednesday, 8 November 2023 15:00 (25 minutes)*

**Presenter:** SCODEGGIO, Marco (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Spectroscopy

Contribution ID: **21**

Type: **not specified**

## **LHCb**

*Wednesday, 8 November 2023 15:25 (25 minutes)*

**Presenter:** PAPPAGALLO, Marco (INFN & University of Bari)

**Session Classification:** Spectroscopy

Contribution ID: 22

Type: **not specified**

## **Double-charm spectroscopy at ATLAS and CMS**

*Wednesday, 8 November 2023 16:20 (25 minutes)*

**Presenter:** TURCHIKHIN, Semen (Università degli studi di Genova)

**Session Classification:** Spectroscopy

Contribution ID: 23

Type: **not specified**

## **Spectroscopy at Belle II**

*Wednesday, 8 November 2023 16:45 (25 minutes)*

**Presenter:** BOSCHETTI, Alessandro (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Spectroscopy



Contribution ID: 24

Type: **not specified**

## **JALAB-EIC: Baryons Spectrum and Structure**

*Wednesday, 8 November 2023 17:10 (25 minutes)*

**Presenter:** D'ANGELO, Annalisa (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Spectroscopy

Contribution ID: 25

Type: **not specified**

## Discussion

*Wednesday, 8 November 2023 17:35 (30 minutes)*

**Session Classification:** Spectroscopy

Contribution ID: 26

Type: **not specified**

## Theoretical overview

*Thursday, 9 November 2023 09:00 (25 minutes)*

**Presenter:** BARDUCCI, Daniele (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Dark sector

Contribution ID: 27

Type: **not specified**

## **Dark sector @ ATLAS and CMS**

*Thursday, 9 November 2023 09:25 (25 minutes)*

**Presenter:** POMPA PACCHI, Elena (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Dark sector

Contribution ID: 28

Type: **not specified**

## Dark sector searches at LHCb

*Thursday, 9 November 2023 09:50 (25 minutes)*

**Presenter:** REDI, Federico Leo (CERN)

**Session Classification:** Dark sector

Contribution ID: 29

Type: **not specified**

## **Dark sector searches at BELLE-II**

*Thursday, 9 November 2023 10:15 (25 minutes)*

**Presenter:** CAMPAJOLA, Marcello (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Dark sector

Contribution ID: **30**

Type: **not specified**

## **Dark sector searches at dump experiments**

*Thursday, 9 November 2023 11:15 (25 minutes)*

**Presenter:** DOBRICH, Babette (CERN)

**Session Classification:** Dark sector

Contribution ID: 31

Type: **not specified**

## **PADME X(17) sensitivity update**

*Thursday, 9 November 2023 11:40 (25 minutes)*

**Presenter:** RAGGI, Mauro (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Dark sector



Contribution ID: 32

Type: **not specified**

## Introduction

*Friday, 10 November 2023 09:00 (10 minutes)*

**Presenters:** GALLI, Luca (Istituto Nazionale di Fisica Nucleare); GIOVANNELLA, Simona (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LFV

Contribution ID: 33

Type: **not specified**

## Theory introduction

*Friday, 10 November 2023 09:10 (25 minutes)*

**Presenter:** ARDU, Marco (Université de Montpellier)

**Session Classification:** LFV

Contribution ID: 34

Type: **not specified**

## **Status and perspectives of cLFV at MEG**

*Friday, 10 November 2023 09:35 (25 minutes)*

**Presenter:** VENTURINI, Antoine (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LFV

Contribution ID: 35

Type: **not specified**

## **Status and perspectives of cLFV at Mu2e**

*Friday, 10 November 2023 10:00 (25 minutes)*

**Presenter:** DIOCIAIUTI, Eleonora (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LfV

Contribution ID: 36

Type: **not specified**

## **Status and perspectives of LFV at ATLAS and CMS**

*Friday, 10 November 2023 10:25 (25 minutes)*

**Presenter:** ARUTA, Caterina (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LFV

Contribution ID: 37

Type: **not specified**

## Lepton Flavour Universality tests at Belle II

*Friday, 10 November 2023 11:20 (25 minutes)*

**Presenter:** GAUDINO, Giovanni (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LFV

Contribution ID: 38

Type: **not specified**

## **Status and perspective of LFV at LHCb**

*Friday, 10 November 2023 11:45 (25 minutes)*

**Presenter:** ARCHILLI, Flavio (CERN)

**Session Classification:** LFV

Contribution ID: 39

Type: **not specified**

## **Perspective on cLFV with high intensity muon beams at PSI and FNAL**

*Friday, 10 November 2023 12:10 (25 minutes)*

**Presenter:** RENGA, Francesco (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** LFV



Contribution ID: 40

Type: **not specified**

## Discussion

*Friday, 10 November 2023 12:35 (30 minutes)*

**Session Classification:** LFV

Contribution ID: 41

Type: **not specified**

## Dark sector searches at NA64

*Thursday, 9 November 2023 12:05 (25 minutes)*

**Presenter:** CELENTANO, Andrea (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Dark sector

Contribution ID: 42

Type: **not specified**

## Closing

*Friday, 10 November 2023 13:05 (30 minutes)*

**Presenter:** SPADARO, Tommaso (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 43

Type: **not specified**

## **Welcome address by the director of the Roma Tre INFN section**

*Wednesday, 8 November 2023 09:00 (10 minutes)*

**Presenter:** ORESTANO, Domizia (Istituto Nazionale di Fisica Nucleare)