

# **Virgo-ET Pisa internal workshop**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Introduction to the workshop**

*Wednesday, 22 May 2024 10:00 (10 minutes)*

**Presenter:** CELLA, Giancarlo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: 2

Type: **not specified**

## Overview of the activities: past and present

*Wednesday, 22 May 2024 10:10 (15 minutes)*

**Presenter:** CELLA, Giancarlo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: 3

Type: **not specified**

## **Advanced VIRGO ITF: present status of O4b Run and perspectives**

*Wednesday, 22 May 2024 14:00 (25 minutes)*

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

**Session Classification:** S1

Contribution ID: 4

Type: **not specified**

## **Astrophysical sources**

*Wednesday, 22 May 2024 10:50 (15 minutes)*

**Presenter:** Prof. POGGIANI, Rosa (PI)

**Session Classification:** S1

Contribution ID: 5

Type: **not specified**

## **R&D of new seismic filters**

*Wednesday, 22 May 2024 12:10 (25 minutes)*

**Presenter:** FIDECARO, Francesco (University of Pisa and INFN)

**Session Classification:** S1

Contribution ID: 6

Type: **not specified**

## **R&D Activities on Superattenuators**

*Wednesday, 22 May 2024 12:35 (25 minutes)*

**Presenter:** FRASCONI, Franco (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: 7

Type: **not specified**

# Suspension Control

*Wednesday, 22 May 2024 11:05 (25 minutes)*

**Presenter:** GENNAI, Alberto (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1



Contribution ID: 8

Type: **not specified**

## **Discussion (about experimental activities)**

*Wednesday, 22 May 2024 14:25 (45 minutes)*

**Session Classification:** S1

Contribution ID: 9

Type: **not specified**

## Multimessengers

*Wednesday, 22 May 2024 10:25 (25 minutes)*

**Presenter:** PATRICELLI, Barbara (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: **10**

Type: **not specified**

# Machine learning

*Wednesday, 22 May 2024 15:10 (25 minutes)*

**Presenter:** RAZZANO, Massimiliano (University of Pisa and INFN-Pisa)

**Session Classification:** S1

Contribution ID: 11

Type: **not specified**

## Fundamental physics

*Wednesday, 22 May 2024 15:35 (25 minutes)*

**Presenter:** DEL POZZO, Walter (P)

**Session Classification:** S1

Contribution ID: 12

Type: **not specified**

# Cosmology

*Wednesday, 22 May 2024 16:00 (25 minutes)*

**Presenter:** RICCIARDONE, Angelo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: 13

Type: **not specified**

## **Discussion (about data analysis activities)**

*Wednesday, 22 May 2024 16:40 (45 minutes)*

**Session Classification:** S1

Contribution ID: 14

Type: **not specified**

## ECR NGSA

*Thursday, 23 May 2024 14:00 (10 minutes)*

**Presenter:** ORSINI, Leonardo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 15

Type: **not specified**

# Mechanical design for future Superattenuators

*Thursday, 23 May 2024 14:10 (10 minutes)*

**Presenter:** LUCCHESI, Leonardo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2



Contribution ID: 16

Type: **not specified**

## **Advancements in sensing and actuation for a Superattenuator's Active Platform**

*Thursday, 23 May 2024 14:20 (10 minutes)*

**Presenter:** SPADA, Francesca Romana (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 17

Type: **not specified**

# **New real-time control system R&D for Einstein Telescope**

*Wednesday, 22 May 2024 11:30 (10 minutes)*

**Presenter:** PROSPERI, Paolo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: **18**

Type: **not specified**

# **TeRABIT –A highway for data in gravitational wave experiments**

*Thursday, 23 May 2024 14:30 (10 minutes)*

**Presenter:** FIORI, Alessio (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 19

Type: **not specified**

## **Probabilistic Machine Learning for the study of burst sources**

*Thursday, 23 May 2024 14:50 (10 minutes)*

**Presenter:** DE SANTI, Federico (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 20

Type: **not specified**

## **Software infrastructure for developing superattenuator prototypes**

*Thursday, 23 May 2024 15:50 (10 minutes)*

**Presenter:** VACATELLO, Michele (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 21

Type: **not specified**

## **Development of control system for next-generation Superattenuators.**

*Thursday, 23 May 2024 16:00 (10 minutes)*

**Presenter:** PALAIA, Maria Antonietta (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 22

Type: **not specified**

## **First Tests on Pendulum Inverted Pendulum**

*Thursday, 23 May 2024 15:40 (10 minutes)*

**Presenter:** BELLIZZI, Lorenzo (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: 23

Type: **not specified**

## **Gravitational waves from compact binary systems: observational prospects for Advanced Virgo**

*Thursday, 23 May 2024 15:20 (10 minutes)*

**Presenter:** MUCCILLO, Luca

**Session Classification:** S2



Contribution ID: 24

Type: **not specified**

## **Fast localization and galaxy host ranking with bayesian nonparametrics**

*Thursday, 23 May 2024 15:30 (10 minutes)*

**Presenter:** CAPURRI, Giulia

**Session Classification:** S2

Contribution ID: 27

Type: **not specified**

## **Final consideratins and future perspectives**

*Thursday, 23 May 2024 16:10 (30 minutes)*

**Session Classification:** S2

Contribution ID: 28

Type: **not specified**

## **Birifrangenza di specchi e substrati: il laboratorio Siena/Ferrara**

*Wednesday, 22 May 2024 11:40 (15 minutes)*

**Presenter:** DELLA VALLE, Federico (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1

Contribution ID: 29

Type: **not specified**

## **Deep learning applications to gravitational wave signals detection and analysis**

*Thursday, 23 May 2024 14:40 (10 minutes)*

**Presenter:** PAPALINI, Lucia (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S2

Contribution ID: **30**

Type: **not specified**

## **Overview of suspension activities for current and future GW detectors**

*Wednesday, 22 May 2024 11:55 (15 minutes)*

**Presenter:** Dr BOSCHI, Valerio (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** S1