#### **PRESENTATION**

Since its very first edition in October 1994 the AIVELA Conference on Vibration Measurements by Laser Techniques has established itself as the international forum where research ideas and technological innovation on Laser Vibrometry were presented and exchanged. Ancona, an ancient and fascinating Italian town situated on the Adriatic coast, became the biennial destination of the international laser vibrometry community, hosted by AIVELA at the premises of the local university (today Università Politecnica delle Marche).

The event was initially focused on Vibration Measurements by Laser Techniques and it immediately met large consensus among the International Research Community. In 2010 the Scientific Committee decided to widen the topics of the event by including also other noncontact techniques and the name of the event was changed to International Conference on Vibration Measurements by Laser and Noncontact Techniques.

The Conference aims at creating an active and stimulating forum where current research results and technical advances can be exchanged and the development of new systems for laboratory use, field testing and industrial application can be promoted. For this reason, experts in vibration and acoustics, manufacturers and authorities in the field of optical and non- invasive instrumentation and industrial users of such measurement devices have come from all over the world to present their activities and innovative approaches to vibration measurements.

#### **TOPICS**

Papers are sought on every aspect of Vibration Measurements by Laser and Noncontact Techniques; the following list of topics is given as guidance:

#### **MEASUREMENT TECHNIQUES**

**PHOTOELASTICITY** 

LASER DOPPLER VIBROMETRY FULL FIELD INTERFEROMETRIC TECHNIQUES HOLOGRAPHIC TECHNIQUES **ELECTRONIC SPECKLE PATTERN** INTERFEROMETRY (ESPI) SHEAROGRAPHY SPECKLE TECHNIQUES FIBER BRAGG GRATING (FBG) VISION BASED TECHNIQUES **OPTICAL SENSORS** RADAR LASER MICROWAVE INTERFEROMETRY **ULTRASONIC TECHNIQUES THERMOELASTICITY** 

SIGNAL PROCESSING TECHNIQUES MICROSCOPIC LASER-DOPPLER VIBROMETRY MULTI-CHANNEL LDV NEW COMPONENTS FOR LDV PHOTONICS INTEGRATED CIRCUITS FOR LDV TECHNIQUES TO AVOID SPECKLE EFFECTS PARAMETER IDENTIFICATION FROM LDV-DATA (LDV SPECTROSCOPY) VIBRATION DETECTION IN OPTICAL COHERENCE

**TOMOGRAPHY** 

TECHNICAL SOLUTIONS FOR SUB-FEMTOMETER LDV

#### **APPLICATION AREAS**

**ACOUSTICS** 

ACTIVE AND PASSIVE NOISE & VIBRATION CONTROL VIBRO-ACOUSTICS AND NOISE, TESTING, NOISE VIBRATION HARSHNESS NVH AND CONTROL MODAL ANALYSIS

METROLOGY, CALIBRATION AND STANDARDS NON DESTRUCTIVE TESTING AND DAMAGE DETECTION INDUSTRIAL DIAGNOSTICS AND QUALITY CONTROL CIVIL STRUCTURES AND INFRASTRUCTURES LASERS IN ART CONSERVATION

LASER MEASUREMENTS IN MICROSYSTEMS & NANO **TECHNOLOGIES** 

TRANSPORT: NOISE VIBRATION HARSHNESS NVH

**COMFORT** SAFFTY

**SECURITY** 

ROTATING MACHINERY

VULCANOLOGY, HEARTHQUAKE ENGINEERING

NOISE & VIBRATION IN AGRICULTURE

FOOD PROCESSING

INDUSTRIAL PROCESSING MONITORING AND CONTROL

**ELECTROMOBILITY** 

**GRAVITATIONAL WAVE DETECTION** 

CAVITY OPTOMECHANICS

#### LANGUAGE

The official language of the Conference is English.

#### **CALL for PAPERS**

Extended abstracts on the topics of the conference must be sent to the Conference Secretariat not later than 24th April 2023. Abstracts should include:

- 1. Title of paper:
- 2. Full names of all Authors (the name of the Presenting Author must be underlined) and Affiliation;
- 3. Text (about 500 words plus supporting figures).

Abstracts must be sent by e-mail to: aivela@univpm.it. Authors will be notified their abstract acceptance and given proper instructions for presentation by 29th April 2023.

#### **IMPORTANT DEADLINES**

Abstract submission

24 April 2023

Abstract acceptance

29 April 2023

Early registration (discounted fee)



#### **PROCEEDINGS**

The Conference proceedings will be published in electronic format after the event by an internationally renowned Publishing House and indexed in the leading databases of scientific & engineering literature, including SCOPUS, ISI Web of Science, etc. Accepted authors will be given details and instructions.

#### **INVITED LECTURES**

Keynote and Invited Lectures will be delivered by leading personalities in the field of vibration measurements by laser and non-contact techniques.

#### **TUTORIALS**

The Conference Programme will also include Tutorials held by leading instrumentation manufacturers.

#### **EXHIBITION**

An exhibition is planned to enable participating organisations to bring their products directly to the attention of potential customers. Leading manufacturers of laser vibrometer systems, non-contact instrumentation and systems for vibro-acoustic testing will exhibit. Additional information can be obtained by returning the Pre-Registration Form.

#### **SHORT COURSE**

A one-day tutorial course will be held the day before the Conference to provide the fundamentals of vibration measurements by optical techniques. The course will include theoretical lectures in the morning and hands-on lab sessions in the afternoon.

#### **VENUE**

The event will be held in Ancona, a fascinating Dorian town on the Adriatic coast in central Italy, surrounded by the breathtaking scenery of the Conero Riviera.

#### **CONTACT INFORMATION**

For information, contact:

A.I.VE.LA.

c/o Dept of Industrial Engineering and Mathematical Sciences - Università Politecnica delle Marche, Ancona,

e-mail: aivela@univpm.it https://www.aivela.org

## 15<sup>th</sup> International Conference on VIBRATION MEASUREMENTS by LASER and NONCONTACT TECHNIQUES & SHORT COURSE

#### **Pre-registration Form**

Please, return to:
A.I.VE.LA. Conference Secretariat
aivela@univpm.it

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Date

Signature

Title(IVII, IVIS, DI.)	
First Name	
Surname	
Company	
Section	
Address	
Post code/ City	
Country	
Telephone	
Fax	
E-mail	
Cross one or more entries:  I am interested in the Conference I am interested in the Short Course I am interested in exhibiting products and would like to have information on Exhibition facilities and fees I would like to present a paper  Subject or title of the paper	
Suggested session	

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#### **Call for papers**

# 15th Inti CONFERENCE on VIBRATION MEASUREMENTS BY LASER AND NONCONTACT TECHNIQUES

#### & SHORT COURSE

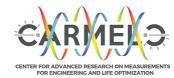


### Ancona, Italy 20th – 23rd June 2023

Organised in collaboration with:



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http://www.aivela.org/15th\_Conference/index.html