# ICTP College on Optics: Theory and Applications of Lidior



16 - 20 May 2022 An ICTP Virtual Meeting Trieste, Italy

Further information: http://indico.ictp.it/event/9790/ smr3706@ictp.it

Light Detection and Ranging (LIDAR) is a remote sensing method that is growing rapidly as a method of generating three-dimensional images in applications as diverse as climate science, archaeology, fisheries, and autonomous vehicle navigation.

#### **Directors:**

- J. SHAW, Montana State University, USA
- J. NIEMELA, ICTP, Italy

### **Local Organiser:**

J. NIEMELA, ICTP, Italy

## **Description:**

A lidar instrument must be designed with careful consideration of the application-driven needs, but this design is based on some common optical principles. This will be a forum where these principles are taught and discussed, along with representative applications drawn from current research and industry activities.

The college will be entirely virtual and abbreviated so that it is reasonably accessible over a wide range of time zones. In addition to lidar there will be special topics related to the UNESCO International Day of Light touching on best practices in outreach, training and research.

## **Topics in Lidar:**

- Atmospheric Lidar
- Insect and Fish Lidar
- Lidar for Autonomous Vehicles
- Coherent Lidar
- Photon-Counting Compressive Lidar

# Speakers (Lidar): J. HOWELL, The Hebrew University

- J. HOWELL, The Hebrew University of Jerusalem, Israel W. R. BABBITT, Montana State University, USA
- J. SHAW, Montana State University, USA

## **Special Topics:**

- Educational outreach and gender equity
- ICTP Laboratory opportunities for developing country scientists
- Optical Encryption

# **Speakers (Special Topics):**

- I. ASHRAF ZAHID, Quaid-i-Azam University, Islamabad, Pakistan
- J. F. BARRERA, Universidad de Antioquia, Colombia
- H. CABRERA, ICTP, Italy

## How to apply:

Online application: http://indico.ictp.it/event/9790/

Female scientists are encouraged to apply.

## **Registration:**

There is no registration fee.

\_\_\_\_\_









12 May 2022





