# 23rd International Workshop on Radiation Imaging Detectors


**Sunday, 26 June 2022 - Thursday, 30 June 2022**

**Riva del Garda, Italy**

# Scientific Programme

The workshop will have plenary sessions with invited speakers and contributed papers presented orally and in poster sessions. The invited talks will be chosen to review recent advances in different areas covered in the workshop.

Two **Best Poster Awards** will be attributed.

# Applications

Material Analysis
X-ray diffraction and fluorescence
Protein crystallography
Tomography, high resolution and fast imaging
Biological and medical imaging
Electron microscopy
Security systems and other industrial applications
Applications at X-ray free electron lasers
Neutron imaging
Astronomical and space applications
High energy physics
Nuclear physics
Fusion research

# Detector Systems

This session covers the wide variety of detector systems from extensive LHC detectors to small single diode systems, from visible light to heavy charged particles.

# Sensor Materials, Device Processing & Technologies

Silicon (single crystal and amorphous)
Gallium Arsenide, Cadmium Telluride and other semiconductors
3D and edgeless sensors
Gaseous detectors
Quantum devices
Processing
Characterization
Radiation damage
Scintillators

# Front-end Electronics and Readout

Monolithic and hybrid systems
Single photon counting and charge integrating front ends
3D asics
Monolithic active pixel sensors
CCDs
Data readout architectures

Hardware and software
Data compression, transfer and storage

# Imaging Theory

Imaging with ionizing radiation
Complementary imaging techniques at different length scales
Fluorescence mapping and tomography
Low radiation dose approaches Applications
Material & life science
Multi wavelength techniques
Element mapping in 2D / 3D
High resolution imaging
Sub ns imaging
TOF and particle tracking
High power lasers
Electron microscopy