

# 22nd International Workshop on Radiation Imaging Detectors



**Sunday, June 27, 2021 - Thursday, July 1, 2021**

**Online**

## **Conference topics**

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.

## **Sensor Materials, Device Processing & Technologies**

Si, a-Si, Ge, GaAs, CdTe and other semiconductors  
CVD Diamond detectors  
Scintillators  
Gaseous detectors  
Quantum devices  
Drifting schemes  
Processing, Characterization, Reliability & Radiation damage

## **Front end electronics and readout**

Monolithic and hybrid systems  
Spectroscopic systems  
Charge integrating and counting systems  
3D ASICs and 3D interconnections  
Data compression, transfer and storage  
>100 GHz electronics

## **Imaging theory**

Imaging with ionizing radiation  
Complementary imaging techniques at different length scales  
Fluorescence mapping and tomography reconstruction with limited data sets  
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 energy physics  
High power lasers  
Applications at X-ray free electron lasers  
Electron microscopy  
Neutron imaging  
Security systems and other Industrial applications  
Astronomical and space applications  
Nuclear physics  
Fusion research

## **Applications**

Material & life science  
Multi wavelength techniques  
Element mapping in 2D / 3D  
High resolution imaging  
Sub ns imaging  
TOF and particle tracking  
High energy physics  
High power lasers  
Applications at X-ray free electron lasers  
Electron microscopy  
Neutron imaging  
Muon imaging  
Security systems and other Industrial applications  
Astronomical and space applications  
Nuclear physics  
Fusion research

## **Highlighted sessions**

Hyperspectral X-ray sensors  
Large-scale position-sensitive particle detectors