20th Real Time Conference

Sunday 5 June 2016 - Friday 10 June 2016

Padova, Italy

Conference Topics

RT2016 is an interdisciplinary conference on realtime data acquisition and computing applications in the physical sciences. These applications include

High energy physics

Nuclear physics

Astrophysics and astroparticle physics

Nuclear fusion

Medical physics

Space instrumentation

Nuclear power instrumentation

Realtime security and safety

General Radiation Instrumentation

Topics

Specific topics include (but are certainly not limited to) the list shown below.

Emerging Technologies / Feedback on Experience

Hardware, software, tools, and techniques / Lessons learned from successes and failures.

New Standards

Standard such as ACTA/µTCA

Data Acquisition

Readout data paths and system architectures as well as conceptual design for future instruments (machines and detectors)

Real Time Safety and Security

For small and large instruments

Upgrades

Improvement of existing large and small systems.

Control, Monitoring,Test and Real Time Diagnostics Systems

For small and large instruments.

Trigger Systems

As applied to the physical sciences.

Real Time System Architectures and Intelligent Signal Processing

Includes system architectures dealing with realtime data acquisition, extraction, compression, intelligent signal processing and storage applied to the physical sciences.

Fast Data Transfer Links and Networks

Includes every data transfer protocol from local data transfer up to global fast networks with their associated hardware (routers, switches, etc.)

Front End Electronics and Fast Digitizers

Ultra-fast ADCs, TDCs and Switched Capacitor Arrays in the GHz range and their applications.

Processing Farms

Processing farms for high level trigger and online selection.

Real Time Simulation

Simulation of real time DAQ