

# 12th Beam Telescopes and Test Beams Workshop



Contribution ID: 77

Type: **Lecture**

## Introduction to TDAQ and its scaling principles

*Tuesday, April 16, 2024 9:00 AM (1 hour)*

This lecture is an introduction to the Trigger and DAQ (TDAQ) systems for small and medium HEP experiments. After introducing the main role of TDAQ and its requirements, it goes through the basic TDAQ concepts, like digitisation, latency, deadtime, busy logic and derandomization. Each component of the TDAQ framework is described with the corresponding technology choices, following the scaling from small to medium scale systems, spotting any bottle-neck and proposing possible evolution.

**Presenter:** PASTORE, Francesca (Royal Holloway, University of London)

**Session Classification:** Lectures