

# 13th Beam Telescopes and Test Beams Workshop



Contribution ID: 2

Type: **Tutorial**

## Constellation Hands-on: Control and DAQ Framework for Test Beams and Beyond

*Tuesday 20 May 2025 14:30 (2 hours)*

Constellation is a control and data acquisition framework for small-scale experiments like test beams or lab characterizations. It provides the necessary functionality for such environments like synchronous operation of several machines, unified configuration interface, logging, telemetry, data transmission and error handling. So-called satellites form the basis of Constellation, which are autonomous programs that control an instrument.

This tutorial provides a short introduction into Constellation and its core principles. The operation of multiple satellites, including configuration and monitoring, is covered as well. Finally, participants of the tutorial will implement their own satellite in Python for real hardware provided for the tutorial.

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**Session Classification:** Hands-on tutorials