

# The ATLAS Muon Trigger Design and Performance

*Friday, July 31, 2020 12:25 PM (15 minutes)*

Muon triggers are essential for studying a variety of physics processes in the ATLAS experiment, including both standard model measurements and searches for new physics. The ATLAS muon trigger consists of a hardware based system (Level 1), as well as a software based reconstruction (High Level Trigger). The muon triggers have been optimised during Run 2 to provide a high efficiency while keeping the trigger rate low. We will present an overview of how we trigger on muons, recent improvements, the performance of the muon trigger in Run 2 data and the improvements underway for Run 3.

## I read the instructions

## Secondary track (number)

**Primary author:** HIGUCHI, Yu Nakahama (Nagoya University (JP))

**Presenter:** HIGUCHI, Yu Nakahama (Nagoya University (JP))

**Session Classification:** Operation, Performance and Upgrade of Present Detectors

**Track Classification:** 12. Operation, Performance and Upgrade of Present Detectors