

# 6th Summer School on INtelligent signal processing for FrontIEr Research and Industry



Contribution ID: 52

Type: **not specified**

## MUON COLLIDERS

*Friday, 27 August 2021 19:45 (45 minutes)*

This lecture will conclude the different R&D projects for new HEP machines.

Muon colliders can offer collisions of point-like particles at very high energies, since muons can be accelerated in a ring without limitation from synchrotron radiation.

However, the need for high luminosity faces technical challenges which arise from the short muon lifetime at rest and the difficulty of producing large numbers of muons in bunches with small emittance. Addressing these challenges requires the development of innovative concepts and demanding technologies.

Dr. Daniel Schulte is Principal Physicist at the Beam Department (BE) at CERN since 2015.

**Presenter:** Dr SCHULTE , Daniel (CERN)

**Session Classification:** INTRODUCTION TO ACCELERATORS