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## Construction of new DC muon beamline, MuSIC-RCNP, for muon applied science

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A new DC muon beamline, MuSIC (MUon Science Innovative muon beam Channel) was constructed at Research Center for Nuclear Physics (RCNP), Osaka University. The MuSIC is a versatile beamline for various experiments in a fundamental physics and a muon applied science. This beamline provides intense positive and negative muon beams from 28 to 110 MeV/c. It is designed to provide an intense muon beam by a novel method with a pion capture superconducting solenoid magnet and a pion transport magnet. They enable us to collect pion very efficiently with very large acceptance.

At present, the beamline is extended with several conventional magnets to an experimental port located at 22 m downstream of the production target to perform experiments. The beamline commissioning was started for investigating and optimizing the muon beam transport, beam parameters and background condition. Some experiments especially with negative muons were performed in parallel to the commissioning.

In this presentation, we will report the MuSIC beamline and current status of the muon beamline commissioning and comment for future prospects in the MuSIC beamline.

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