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## PULSED BEAM GENERATION FOR THE THREE-DIMENSIONAL SPIRAL INJECTION SCHEME TEST

A brand-new three-dimensional spiral injection scheme will be used to inject and store muon beams into the solenoid-type storage magnet for the muon  $g-2$ /EDM experiment at J-PARC. Since this is the first instance to employ this scheme, therefore a prototype experiment is underway at KEK. The prototype experiment is utilizing an 80 keV electron beam to inject and store into the solenoid magnet of strength 82.5 Gauss with a diameter of 24 cm. Currently, preparation to kick and store the pulsed beam in the storage magnet by a kicker is in progress. For the pulsed beam, a beam chopper system was constructed and successfully generated the pulsed beam with a variable pulse width down to 60 ns. To confirm whether the pulsed beam could be generated as intended, the measurement of the pulse width using the ionizing emission of nitrogen gas and scintillating fibers was performed. In this poster, the generation of the pulsed beam using a chopper system and its detection will be discussed.

### Session

Poster Session

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