## MT25 Conference 2017 - Timetable, Abstracts, Orals and Posters



Contribution ID: 869

Type: Poster Presentation of 1h45m

## Windability tests of Nb3Sn Rutherford cables for HL-LHC and FCC

Wednesday 30 August 2017 13:15 (1h 45m)

In the framework of the development of high field magnets made of Nb3Sn superconductor for projects like HL-LHC and FCC studies, it is needed to refine the understanding of the winding process and its impact of the overall mechanical integrity of the conductor. The mechanical behaviour during winding of the unreacted Rutherford type Nb3Sn cables has been studied experimentally. In order to quantify the windability of the various cable designs the measurement method and a dedicated specimen scanning device has been developed. The validation of the device and achieved repeatability are presented. The first obtained test results for cables for HL-LHC, 11 T dipole RRP®, 11 T dipole PIT and MQXF are shown.

## **Submitters Country**

Switzerland

**Authors:** PULIKOWSKI, Dariusz (CERN); LACKNER, Friedrich (CERN); SCHEUERLEIN, Christian (CERN); TOM-MASINI, Davide (CERN); SAVARY, Frederic (CERN); Prof. PAJOR, Mirosław (West Pomeranian University of Technology (PL))

**Presenter:** PULIKOWSKI, Dariusz (CERN) **Session Classification:** Wed-Af-Po3.01

Track Classification: A1 - Superconducting Accelerator Magnets